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A CLASSIFICATION OF POOLS AND ASSOCIATIONS BASED ON AMERICAN EXPERIENCE¹

In his study of combinations and trusts the writer has been much impressed by the repeated recurrence in various pools and associations of certain structural characteristics and peculiarities. It was this that first gave the idea of attempting a logical classification of this type of industrial combination. But some hesitancy was felt in undertaking such a task. In the first place, such a study involves the repetition, in many cases, of well-known facts. In the second place, the character of certain agreements is such as to make satisfactory classification most difficult. In some cases this is due to the paucity of facts in regard to the combination.² In others it arises from the ambiguous character of the agreements themselves or because one must interpret the intention solely from the text of such agreements with no certainty that his diagnosis is the correct one.³ Despite these considerations, the attempt to develop a logical and comprehensive classification of this type of combination may, it is hoped, prove of both interest and value.

American experience shows that pools and associations fall into one of two broad general classes, *i.e.*, *simple* pools or *mixed* pools. For example, each of several manufacturers agrees to sell only a certain percentage of all the goods sold by the group, or a group of manufacturers agree among themselves that they will sell their goods only at certain prices. In either case the

¹ Several of the agreements discussed in this article are reprinted in *Industrial Combinations and Trusts*, edited by W. S. Stevens (New York: Macmillan. 1913. Pp. xiv, 593).

² For this reason several pools and associations have been eliminated from this study. Among them will be found the Wall Paper, Sand Paper, Upholsterers' Felt, and Incandescent Lamp Manufacturers' associations.

³ A good instance of the error that may result from literal interpretation is the Kentucky Distillers Association (see *infra*). Here the text of the agreement indicates output division. Only an examination of testimony reveals how mistaken such a classification would be.

pool is *simple* or *simplex* according to the classification the writer has developed.

Suppose, however, that the group of manufacturers instead of doing only one of these two things had agreed to do both. In that case the pool or association⁴ would no longer be a *simple* but a *mixed* pool. And, as it contemplates two things, *i.e.*, dividing output and fixing prices, it may be termed a *duplex* pool. Add a third object and the pool, still, of course, a *mixed* pool, becomes *triplex* and so on. All these mixed forms, *duplex*, *triplex*, and *quadruplex* pools, are merely varied combinations of the *simple* or *simplex* pool which has seven distinct type forms as follows:

- I. Output⁵ or traffic division;
- II. Output curtailment;
- III. Territorial division;
- IV. Joint sales;
- V. Price;
- VI. Clearing house;
- VII. Legitimate trader.

SIMPLEX POOLS

I. Output or traffic division.

The earliest pools in the United States, of which there is any definite record, were those formed in the cordage industry. So far as the evidence shows, they were *simplex* pools for the purpose of dividing the output.⁶ The first of them was organized about 1860 and they continued a more or less intermittent existence until the formation of the National Cordage Company many years later. The manufacturers met together and divided the business of the country according to certain percentages. Each manufacturer was required to make his returns monthly to a supervisor. If he had exceeded his percentage he was required to pay to the supervisor a certain amount per pound to balance the excess. Those, on the other hand, who fell below their percentage allotment drew upon the supervisor to make up the deficiency.⁷

⁴ The words "pool" and "association" are used interchangeably in many places in this article.

⁵ The word "output" is used to cover not merely the product of a factory but also amount of sales and deliveries.

⁶ It should be borne in mind that the discussion of combinations in this article is based upon information which the writer has been able to secure. It is not unlikely that information in the possession of others might upset the assignments made under the various classes or types.

⁷ Testimony of Mr. Waterbury, *Report of the Industrial Commission*, vol. xiii,

A percentage arrangement slightly different from the cordage agreement is shown in the Steel Rail Pool of 1887. Here it was agreed that 800,000 tons of rails should be allotted at once according to certain agreed percentages. An additional allotment of 250,000 tons was made to the board of control to be reapportioned for the adjustment of differences as deemed equitable. Subsequent allotments were to be divided according to the same ratio. The board of control was required to make these further allotments in order at all times to keep the unsold allotments at least 200,000 tons in excess of the total current sales, as shown by monthly reports. Furthermore, the board was also required to increase the allotments upon the written consent of 75 per cent of the percentages. Three times a year the board had the power to cancel allotments which a party had been unable to make "in due time." These they could reallocate.⁸ The agreement itself provides no penalty for exceeding the assigned allotments, but Belcher is authority for the statement that there was such a penalty which he gives as being from \$1.50 to \$2.50 per ton.⁹

It is extremely interesting to note the remarkable faithfulness with which the salient features of the cordage association are reproduced in a very recent pool, the Atlantic Passenger Conference of 1908. The conference consisted of a westbound and eastbound agreement on steamer traffic. In the western agreement, that is, affecting traffic to the United States, eight companies participated, dividing traffic as follows:

	Per cent
Allan Line .....	.62
Anchor Line	3.40
Cunard Line	13.75
Hamburg-American Line	19.61
Holland-American Line	6.63
North German Lloyd	26.53
Société de Navigation Belge Americaine	9.71
International Mercantile Marine	19.75

p. 126. Cf. also S. J. McLean, "Pools, Trusts, and Industrial Combinations in the United States," *Quarterly Review* (London), vol. 199, p. 185.

⁸ Memorandum of Agreement, *Report of the Commissioner of Corporations on the Steel Industry*, part I, pp. 69-71.

⁹ W. E. Belcher, "Industrial Pooling Agreements," *Quarterly Journal of Economics*, vol. XIX (November, 1904), p. 117. Belcher also states that the concerns in this pool entered into informal price agreements. As these are not contemplated in the original pooling agreement the organization has been classed as *simplex* rather than under one of the mixed groups.

Eastbound, that is, to Europe, the Canadian Pacific Lines became a party to the conference and some rearrangement of the percentages was made. In 1909 the Russian-American Line after a competitive struggle became a member. The percentage allowed to this line is unknown.

The conference agreement provided for a compensatory tax of £4 a head for exceeding the allotted percentage. This was paid to those falling below in theirs. Each line was required to furnish four times a month statistics of all steerage and second cabin passengers. Upon the basis of these figures the secretary supplied the lines with weekly statistical statements of the passengers carried, and with monthly statements showing the relative position of the lines.¹⁰ The conference required each line to furnish a guarantee fund of £1000 for each one per cent of allotment allowed it. "Undue withdrawal" from the conference or "action rendering the continuance of the contract impossible" was penalized by the forfeiture of the entire amount of this deposit. For a wilfully incorrect statement of statistics a line was to be assessed not less than £2500.

While the agreement contained certain provisions in regard to rates, the organization cannot be regarded as susceptible of a mixed classification. The rate provisions were solely in the interest of obtaining an adjustment of traffic that would conform to the schedule of percentages. Being either above or below its percentage, a line was entitled to adopt measures to secure a correct adjustment—presumably by a change of rates. Seventy-five per cent of the lines involved might direct the raising or reduction of rates, but no line might be compelled to fix its gross rate per adult passenger at less than £5, or more than £8, thus leaving a wide margin at the discretion of the line in question.¹¹

II. Output curtailment.

The pool curtailing output, either in the simple or in the mixed form, does not seem to have been common. Its simple form is shown in the Kentucky Distillers Agreement of 1887. This combination

¹⁰ All passengers forwarded in any intermediate class between steerage and cabin were to be considered as steerage passengers. Even cabin passengers were regarded as steeragers, unless paying at least the "lowest cabin fare" as defined in another article of the agreement.

¹¹ Agreement AA, *U. S. v. Hamburg-Amerikanische Packetfahrt Actien-Gesellschaft*. Petition, U. S. C. C. for the Southern District of New York, pp. 40-64.

had its origin in the depressed condition of the trade which had been practically continuous since a period of great overproduction in the earlier eighties. Millions of gallons of whiskey had been exported at that time. Unable, however, to find a European market many distillers were forced to bring the whiskey back in an attempt to secure ultimately a market for it here. This whiskey returning added to the depressed condition of the trade and resulted in the agreement of 1887.¹²

Although expressly stating the right of every signatory to make as much whiskey as he chose, this document provided that it was "for the pecuniary advantage of each" to make only the amount set opposite his name, and further imposed a penalty of twenty cents per proof gallon upon all whiskey made by any signatory in excess of the stipulated amount. Such money was then to be distributed among those confining themselves to the production allotted to them.¹³ On its face, the agreement thus appears to be for division of output, but such was not in reality the case. The significance of the agreement can be appreciated only when it is known that the amount set opposite the names of the various signatories (which does not appear in the text of this original agreement) was 100 gallons each, an amount so small that no distillery could afford to begin operations.¹⁴ It is thus seen that in reality the pool was purely for curtailing output, and did not in any sense contemplate a division of output.

III. Territorial division.

The United Refining Company, organized in the late eighties, dealt in an article which is the product of coal tar, a residuum of the gas works, and which is produced whether there is a demand for it or not. When a large surplus above demand occurred in any one section of the country the whole tendency was to "dump" that surplus upon a market in another section where there was only a moderate amount available. This tended to distribute among all of the manufacturers the loss occurring through surplusage, instead of throwing it upon the party in whose territory it took place. Such a state of affairs led to a territorial agreement. Each party to the compact bound itself to confine its

¹² Testimony of Mr. Atherton, *Report of the Committee of Manufacturers with Reference to Trusts*, H. Rept. 4165, 50 Cong., 2 Sess. (1888-1889), p. 5.

¹³ Articles of Agreement, H. Rept. No. 4165, *op. cit.*, p. 29.

¹⁴ Testimony of Mr. Atherton, *ibid.*, p. 7.

trade and sales to a definite territory and not to send the surplus above such trade and sales elsewhere unless it were required. In event of a large surplusage and no other concern requiring the product, the manufacturer was to destroy it by changing it into pitch, which was accomplished through distillation. The pitch was used as fuel and was also shipped abroad. The manufacturer retained for himself the oils thus secured.¹⁵

General familiarity with the international agreement of the Tobacco combination makes extended treatment unnecessary. In the nineties the American Tobacco Company established a depot in London, England. In 1901 negotiations with a view to purchase were opened with Ogden's (Limited), one of the largest of the tobacco concerns in Great Britain. Before the end of that year substantially all of its outstanding stock had been acquired. The fighting qualities of the American Tobacco interests were well known, and, alarmed at this acquisition, thirteen of the largest English companies united to form the Imperial Tobacco Company. The latter at once opened a campaign to check the invasion and, as a part of its program, threatened to invade the territory upon our side of the Atlantic. As a result an agreement was effected between the Imperial Company and the American interests. In terms this provided that the Imperial Company was not to do business in the United States nor the American companies in the United Kingdom.¹⁶ Another contract, part of the same agreement, provided that the British-American Tobacco Co., Ltd.—a concern to be organized under the companies' acts—should take care of the "export business." By this was meant the manufacture and dealing in tobacco in either England or the United States for export to any country except the other, and also the manufacture and dealing in tobacco and its products in any country or place outside of the United States and England.¹⁷

IV. Joint sales.

Historically the joint-sales pool is nearly as old as the output-division pool. In the former type of organization the various

¹⁵ *Report of the Senate Committee on General Laws on Investigation Relative to Trusts*, N. Y. Sen. Doc. No. 50, 1888, pp. 624-625.

¹⁶ There were certain minor exceptions to this rule of slight importance. *Report of the Commissioner of Corporations on the Tobacco Industry*, Exhibit No. 1, part I, pp. 431 ff.

¹⁷ *Ibid.*, Exhibit No. 2, pp. 440 ff.

manufacturers agree to employ a common sales agent through which agent the products of the combination are marketed. The first organization of this type was formed in the sixties in the salt industry. As early as 1866 many of the salt manufacturers of Michigan were uniting their interests in the sale of the product. In 1868 the Saginaw and Bay Salt Company adopted articles of association, and during the first year of its existence handled four fifths of all the salt shipped from the Saginaw Valley. In 1871 the association broke down, but a new one was formed in 1876 known as the Michigan Salt Association, which, with some changes of name, continued for many years. The Michigan Salt Association was originally incorporated for five years. It had a capital stock of \$200,000 divided into twenty-five-dollar shares of which only two dollars was paid up. It was managed by a board of nineteen directors. Every manufacturer upon becoming a member executed and delivered to the association either a contract for all salt manufactured by him or them or else a lease of salt manufacturing property. This contract did not impose any restriction that would prevent the manufacture of salt at any and all times, though providing that in case the manufacturer sold salt upon private account he should pay the association ten cents for every barrel sold. An annual dividend of seven per cent was paid upon the amount of stock actually paid in before the proceeds of the sales were divided.¹⁸

It is probably evident to the reader that the joint-sales pool must by virtue of the function of joint selling bear a definite relation to price. The act of selling implies the fixing of a price, but the methods of price determination in pools of this type are significant. Where the selling agent has full control of the marketing of the product, as appears to have been the case with the Michigan Salt Association, the parties to the combination have no real voice in the matter of prices. The price of the goods sold is something that arises incidentally, as it were, to the act of selling. In such a case, therefore, one is justified in using the simple form of classification.

An entirely different situation appears, however, when the members of the combination employing the joint-sales agent determine the prices at which their agent shall sell. In such a case

¹⁸ J. W. Jenks, "The Michigan Salt Association," *Political Science Quarterly*, vol. III (1888), pp. 78-98.

the determination of the price is not, as in the former instance, a function incidental to selling, but a matter for the decision of the members of the combination who are entirely outside the sales organization proper. It therefore appears correct to designate such an arrangement as a mixed form in contrast to the simple form mentioned above.¹⁹

V. Price.

The price pool scarcely calls for definition since the majority of people are more familiar with this manifestation of combination than with any other. It is simply an organization for the purpose of fixing and controlling prices. Its earliest appearance, at least in the simple form, seems to have been in the Gunpowder Trade Association of the United States, an organization perfected April 29, 1872, in New York city. The purpose of the combination was to fix and establish prices upon powder throughout the United States. Each of the seven parties to the agreement was entitled to a certain number of votes. Three concerns were allotted ten votes each, three others four votes each, and the last, six votes. The association was to meet four times a year for the purpose of establishing prices. A "council" of five persons was to meet weekly to adjudicate upon discrepancies in, and deviations from, prices.²⁰

The Nashville Coal Exchange was an organization composed of various coal-mining companies operating in Kentucky and Tennessee and of persons and firms dealing in coal in Nashville. Among its purposes, as stated in the articles of the exchange, is the following: "To do all in its power to advance the interests of the coal business at Nashville . . . *and to establish prices on coal*²¹ . . . and to change same from time to time as occasion may require." Coal classed as No. 1 was given a minimum price of 4½ cents per bushel at the mines; freight of 4 cents and dealer's margin of 4½ cents were added to this minimum, making the price of coal 13 cents per bushel. The same arrangement, with certain variations in the charge for the different items, was used for the other classes of coal. When these fixed

¹⁹ *Infra*, Blue Stone Association and Paving Brick Combination.

²⁰ *U. S. v. E. I. du Pont de Nemours and Co.* In Equity No. 280, Government Exhibit No. 96-b, U. S. C. C. of the District of Delaware, Petitioner's Record, Exhibits, vol. 1, pp. 476-479.

²¹ Italics are the writer's.

prices and margins were raised in excess of freight advances, such increase was divided equally between dealers and mine owners. Fines were imposed for violations of the prices established by the exchange; and to secure further enforcement of rules, owners of mines were not to ship to dealers in Nashville not members of the Coal Exchange, and dealers were forbidden to buy coal of owners who were not members.²²

Easily the most interesting pool of the many that have utilized some sort of price-fixing arrangement is the recently dissolved Bathtub trust. This organization was formed in the latter part of 1909 or early in 1910. Its basis was an agreement whereby the manufacturers of sanitary enameled ironware agreed to pay a royalty of \$5 per day upon each furnace operated by them, to a certain Edwin L. Wayman, known as the licensor. To Wayman had been assigned certain patents formerly controlled by the Standard Sanitary, Wolff, and Mott companies, upon a tool commonly used to sprinkle enameling powder upon the red-hot iron tubs and other ware in the process of manufacture. It is significant that this process could also be performed by hand though more conveniently accomplished by the use of the tool in question. Wayman in return for the above furnace royalty agreed to license the manufacturers, under the letters patent transferred to him, to use the tool. Other clauses of the agreement provided that the selling prices to jobbers should be established through the licensor (Wayman) by a price committee appointed by the various manufacturers; also for the allowance, by the licensor on sales to jobbers by some of the smaller concerns, of certain preferential discounts of from 2½ to 5 per cent.

Maintenance of the price schedules of the association was enforced through the furnace clause of the agreement. If the terms of the license were complied with, 80 per cent of the furnace royalties were returned to the concerns by a system of deferred rebates. A violation of any part of the agreement empowered the licensor to withhold all rebates and declare them forfeited.²³ Another interesting feature of the pool was a jobber's license

²² 43 Fed. 898 ff. and 46 Fed. 432 ff.

²³ Memorandum of Agreement and License Agreement, *U. S. v. Standard Sanitary Manufacturing Co. et al.*, U. S. C. C. for the District of Maryland, Record, vol. II, pp. 4-6 and 20-26.

agreement, practically a factor's agreement, providing a scale of discounts and terms and, in addition, a schedule of rebates, *if the jobber complied with all the conditions of the agreement*. A quantity rebate was also provided for. The purchaser agreed to maintain the established selling price and also not to purchase, advertise, sell or solicit orders for any manufacturer not duly licensed by Wayman.²⁴

Upon its face the combination is clearly one to raise prices. The patent feature was employed apparently with the idea that it would make the combination legal or at least strengthen it. This is to some extent borne out by the fact that the combination relied upon *Henry v. Dick* in its appeal to the Supreme Court. That body held that the combination by reason of the restrictions mentioned above clearly contravened the Sherman act and that the added element of the patent could not confer immunity.²⁵

VI. *Clearing house.*

The significant feature of the joint-sales pool is the employment of a sales agent to market the product. In the case of the clearing-house pool, on the contrary, each party to the combination retains control of the marketing of its own product, while the central organization is used simply as a clearing house for the division of the profits realized. As will appear later, the clearing house may be an incorporated company or a purely voluntary association.²⁶

The only clearing-house pool not belonging to one of the mixed forms appears to be the turpentine combination employing an incorporated company for the purpose of clearing. Some question may be raised as to the justice of the classification. The reason for it is to be found in the fact that the agreement contains certain arrangements as to rosin shipments on private account as between Anonyme on the one hand and Patterson and Shotter on the other.²⁷ Inasmuch as these arrangements

²⁴ Jobber's License Agreement, *ibid.*, pp. 32-39.

²⁵ Decree of November 18, 1912, *Standard Sanitary Manufacturing Co. et al. v. United States of America*; on appeal, p. 11.

²⁶ *Infra*, Asiatic and Brazilian Steamship combinations.

²⁷ Among other things it was provided that Patterson and Shotter should not sell rosin for shipment to Belgium nor Anonyme for London or Hamburg, except for the account of the former parties. This arrangement has no bearing

are for rosin, while the pool was concerned only with turpentine, it scarcely seems just to give the pool any but a simple classification. The Globe Naval Stores Company was chartered under the laws of West Virginia, February 15, 1905, for the purpose of dealing in turpentine. Thirty-four per cent (340 shares) of its stock was held by the Patterson-Downing Co.; twenty-one and one half per cent (215 shares) by the S. P. Shotter Co.; twenty-six and one half per cent (265 shares) by the Société Anonyme des Produits Résineux; and eighteen per cent (180 shares) by Nickoll and Knight. These four concerns, in consideration of the premises and one dollar paid to each, sold to the Globe their respective turpentine businesses. They were, none the less, to continue the buying and selling of turpentine, conducting their business as in the past under their own names, but for the account of Globe. Patterson, Shotter and Anonyme were to receive a commission as agents upon sales made by them.

The operations of all the parties to the pool for the account of Globe were to be conducted and entered under a turpentine account. This was charged at cost with all the turpentine bought for Globe and credited with all sales made for its account. A settlement of profit and loss account between Globe and each of the four parties to the agreement was to take place every six months.²⁸

VII. Legitimate trader.

For several years past there has been noticeable an increasing tendency toward the elimination of the middle-man in American business life. More and more, people are endeavoring to supply their wants directly. As this tendency develops, the retailer first finds his means of livelihood menaced and the jobber and wholesaler are also able to read the handwriting on the wall. It is out of this situation that what I term the "legitimate trader" association²⁹ has developed. This type of organization is of interest largely because of the striking contrast between its aims and whatsoever upon the terms and conditions of the agreement as relating to clearing sales of turpentine and may not improperly be regarded as a separate agreement for division of territory on exports of rosin.

²⁸Memorandum of Agreement, *U. S. v. American Naval Stores Co. et al.*, Petition in Equity, U. S. D. C. for the Eastern Division of the Southern District of Georgia, Exhibit A., pp. 25 ff.

²⁹This is not to say that all wholesale and retail associations are legitimate trader associations.

methods of operation and those of the ordinary manufacturers' pool. The legitimate trader association has in view one object,—the confining of the trade to its (in their view) legitimate channels. But this will be found to resolve itself into three separate parts:

(1) To prevent shipments from the manufacturer direct to the consumer;

(2) To confine the shipments of manufacturers to wholesalers and of wholesalers to retailers;

(3) To confine the trade of the retailer to his legitimate territory.

To accomplish these ends several methods have been resorted to, among which classification has been prominent. Many of the large wholesale and retail trades of the country possess so-called credit agencies usually run by or in conjunction with national associations or by associations composed of the dealers in a state or group of states. These organizations publish books recognized as establishing the credit rating, business standing, and classification of dealers.³⁰ In certain cases these rating books have designated by arbitrary definition or rules who are manufacturers, who are wholesalers, and who are retailers. Whenever one whom the retailers regarded as a consumer has been listed as a retailer, the retail association of that district has insisted that his name be stricken from the list and he be properly classified as a consumer. Shipments direct to such consumers were strictly banned by the retail associations. Complaints were made by the members of the latter whenever any wholesaler, manufacturer, dealer, or agent shipped to a person not regarded, according to the classification, as a legitimate retail dealer. In case of such complaint the matter was usually taken up with the manufacturers' or wholesalers' association if the offending party was a member of one. If not, the secretary of the retail association could take up directly the shipment in question,³¹ exerting delicate pressure

³⁰ Thus the *Blue Book* of the lumber trade is published by a corporation called the National Lumber Credit Manufacturers' Corporation, the stock of which is either owned or controlled by an association composed of fifteen or more of the largest manufacturers' associations in the United States. The *Green Book* of the Southern Wholesale Grocers' Association was published by that association and the *Blue Book* of the plumbing trade was issued by the National Committee of the Confederated Supply Associations.

³¹ Constitution of Michigan Retail Lumber Dealers Association; *U. S. v. Hartwick*, Petition, U. S. C. C. for the Eastern District of Michigan, Southern Division, pp. 45-48.

through the fact that the retailers, members of the said association, might refuse the offending manufacturer or wholesaler any further orders. In the same or analogous ways the wholesalers' associations may endeavor to prevent the shipment from producers and manufacturers to others than the members of the wholesale association.³²

In certain cases the names of individuals and concerns making these so-called "unethical" shipments have been published in the trade journals thereby operating as a boycott.³³ In other instances lists of such individuals and lists of legitimate dealers have been sent through the mails by committees on classification or by secretaries of retail associations.³⁴ In 1902 in the lumber trade the Lumber Secretaries' Bureau of Information was incorporated. It was a continuation of an earlier unincorporated association and its purpose was to advance the interest of the retail dealers who were members of the lumber retailers' associations. Composed originally of the secretaries of some five or six retail associations it came to include many more. Correspondence between the secretary members furthered the ends discussed above and the bureau served as an efficient agent for the dissemination of information in regard to unethical shipments.³⁵

Frequently the closest kind of coöperation has existed between the wholesale and retail associations in the same trade. It has in at least one instance extended to joint classification by the wholesale and retail associations. The question of who are retailers is always an important one, and the interests of the wholesaler are to a certain extent opposed to those of the retailer. This arises through the fact that the former is looking, in the interest of his sales, to as wide a definition of the term as possible, while the retailer insists upon strictly excluding many large buyers such as mail-order houses and coöperative organizations from the

³² Decree of Injunction, *U. S. v. Southern Wholesale Grocers' Association et al.*, U. S. C. C. for the Northern District of Alabama, p. 4; and *U. S. v. Pacific Coast Plumbing Supply Association*, Petition, U. S. C. C. for the Southern District of California, pp. 12-14.

³³ *U. S. v. Hollis*, Petition, U. S. C. C. for the District of Minnesota, p. 57.

³⁴ Exhibits O-U, *U. S. v. Eastern States Retail Lumber Dealers' Association*, Petition U. S. C. C. for the Southern District of New York, pp. 92-100; and Exhibit A, *op. cit.*, *U. S. v. Hollis*, pp. 69 ff.

³⁵ *Op. cit.*, *U. S. v. Hollis*, p. 41.

classification of retailers.³⁶ Finally, in some cases trade conventions and assemblies have adopted articles, resolutions, and agreements looking to better classification and to controlling the trade in the channels outlined above.³⁷

In the Tile, Mantel and Grate Association of California similar objects were apparently held in mind, though the method of attainment was somewhat different. The Tile, Mantel and Grate Association was an unincorporated organization formed in 1898, composed of dealers (not manufacturers) in tiles, mantels, and grates in San Francisco or within a radius of two hundred miles, and having an established business carrying not less than \$3000 worth of stock. This appears to be classification by an arbitrary definition of what constitutes a dealer. All manufacturers of tiles and fireplace fixtures throughout the United States might become non-resident members of the association by the payment of an entrance fee and the signing of the constitution and by-laws. The true significance of the organization appears in sections 7 and 8. No member was allowed to purchase of a manufacturer not a member, nor to sell to non-members at less than the full list price which was about fifty per cent higher than the price when sold to a member. Furthermore a manufacturer selling to any one outside of the association forfeited his membership.³⁸ In other words, a manufacturer by selling to other dealers than those carrying \$3000 of stock automatically lost the trade of the member dealers of the association. The operation of the combination was such, therefore, as to confine the dealing in tiles, mantels, and grates to those defined above as dealers.

DUPLEX POOLS

Output division and price.

The Soft Steel Pool of 1896, the Structural Steel Association of 1897 and the Steel Plate Association of 1900 all divided output upon a percentage basis. The Soft Steel Pool provided a

³⁶ *Op. cit.*, *U. S. v. Eastern States Retail Lumber Dealers' Association*, pp. 37 ff.

³⁷ *Ibid.*, Boston, Baltimore and Pittsburgh lumber and trade agreements, Exhibits F, H, and I, pp. 80-87. It should be noted that an injunction was recently handed down against the Eastern States Retail Lumber Dealers' Association and other associations, parties to the same suit.

³⁸ 98 Fed. 817; 106 Fed. 38; 115 Fed. 27; 193 U. S. 38. Though this agreement seems to have affected prices the clauses of it available say nothing of prices. Hence the simplex classification has been used.

scale of minimum prices for different trade centers, varying from \$20.25 to \$22.50 per ton. Originally this organization considered a monthly fixing of tonnage, but this feature was finally dropped. Excess above the percentage allotment was penalized by a tax of two dollars per ton, the sums thus received being distributed among the works that had failed to ship their allotment.³⁹

Both the Structural Steel and the Steel Plate agreements provide for the maintenance of the pool prices as established in separate schedules. Both organizations likewise required the rendering of monthly statements to a commissioner who made up the accounts, charging those who had exceeded their percentage allotment and crediting those who had failed to sell theirs. Members of the Structural Steel Association were required to deposit \$2500 each and \$500 a month thereafter until the sum of \$45,000 had been received, this fund to serve as a guarantee for the performance of the obligations of the agreement. The penalty set for exceeding the percentage allotment was half a cent per pound. The guarantee fund of the Steel Plate Association was made up by a deposit of \$1000 for each one per cent of the output allotted. Those exceeding the established percentage were fined .35 of a cent per pound.⁴⁰

The Explosives Agreement of 1886 presents a peculiar arrangement in the method of dividing output. The twelve parties to this agreement were divided into two groups, one of three companies and one of nine companies. Of the aggregate trade of the parties⁴¹ each one of the "Nine Companies" group received an arbitrary allotment of so many kegs of blasting powder or so many kegs of sporting powder or so many kegs of each. When the yearly trade of the "Three Companies" increased beyond the average for the years of 1882, 1883, and 1884, the arbitrary allotment made to each of the "Nine Companies" was increased by a corresponding percentage. If the "Nine Companies," however, sold more than their arbitrary allotments they were penalized by being compelled to take as a unit from the "Three Companies"

³⁹ *Iron Age*, vol. I (1896), p. 875.

⁴⁰ Exhibits A and B, *U. S. v. U. S. Steel Corporation*, U. S. C. C. for the District of New Jersey, pp. 70-82.

⁴¹ Except the anthracite regions of Pennsylvania and in cases of government and export sales. The exception of the anthracite regions in which the "Nine Companies" were not to trade, while a territorial arrangement, scarcely justifies a *triplex* classification of this agreement instead of the *duplex* one used.

sufficient powder to adjust the liability. It thus appears that while the "Nine Companies" were penalized for exceeding their allotments, the "Three Companies" were entirely free from any fine and might sell to any extent they chose. Another clause of the agreement provided that separate agreements should be executed by the parties to the combination relative to the prices to be maintained for sales of powder. Arrangements were also made for a board of arbitration to adjust disputes.⁴²

The "Fundamental Agreement" of the explosives trade that three years later followed the agreement of 1886 is similar in character. This time, however, all companies (the "Three Companies" being regarded collectively) were allotted arbitrary quotas of powder. This was done in the case of the "Three Companies" by converting the average for the years 1882, 1883, and 1884 into arithmetic terms. Though thus setting arbitrary quotas in all cases, the pool was really upon a percentage basis, for the agreement provided that commutations in money values should be made for "sales in excess or in deficiency of the *proportions*"⁴³ to which each party should be entitled in the division of trade." This destroyed the unlimited right of sale without penalty enjoyed by the "Three Companies" under the prior agreement.

The agreement was unlike its predecessor in dividing the country (excepting certain portions) into seven zones,⁴⁴ in each of which uniform prices were to prevail. As in the former case a board for the arbitration of disputes was provided for and prices were established in supplementary agreements.⁴⁵

Price and clearing house.

An interesting case of pooling under the duplex form is to be found in the Table and Stair Oilcloth Association. This combination was organized in June, 1886, for the purpose of obtaining a fair price for the product and also in order to prevent its utilization as a "leader" in the dry-goods trade. The basis

⁴² Agreement, Government Exhibit No. 7, *U. S. v. E. I. du Pont de Nemours and Co.*, U. S. C. C. for the District of Delaware, Petitioner's Record, Exhibits, vol. I, pp. 110-121.

⁴³ Italics are the writer's.

⁴⁴ It should be noted that the scope of this agreement territorially was the same as that of the 1886 agreement.

⁴⁵ Agreement, Government Exhibit No. 6, *op. cit.*, *U. S. v. E. I. du Pont de Nemours and Co.* Petitioner's Record, Exhibits, vol. I, pp. 94-109.

of the pool was several separate contracts, one being made by the association with each individual manufacturer. The form of each contract was such as practically to constitute each manufacturer a factor of the association. Each agreed, for example, not merely to maintain the prices fixed but also not to sell at less than the full list price to purchasers who did not maintain prices; not to offer anything outside of the intrinsic value of the goods for the purpose of obtaining an order or effecting sales; not to sell except upon certain credit terms; not to pay freight except in certain specified cases; not to pay agents more than certain commissions, etc. The agreement provided for certain rebate allowances which might be made by the manufacturer members of the association to those purchasers who maintained prices, etc.

The arrangement in regard to clearing provided that each manufacturer was to pay into the pool twenty-five cents per piece for all goods sold, the word piece being arbitrarily defined as meaning so many yards of shelf oilcloth or so many yards of stair oilcloth. Exactly how these sums of money were divided does not clearly appear, but as certificates of beneficial interest were issued and sold by the association to the various manufacturers, it is not unlikely that these were utilized for the purposes of division. Failure to comply with all the terms of the contract subjected the concern or individual to heavy penalties. These were drawn from a fund created by the deposit of cash or convertible securities of a satisfactory character. The affairs of the association were in the hands of a commissioner.⁴⁶

In its principal aspects the Envelope combination was similar to the Table and Stair Oilcloth Association except that the former used a corporation for pooling purposes instead of a voluntary association. The Standard Envelope Co. was a Massachusetts corporation with a capital of \$5100 organized by certain envelope manufacturers in that state and Connecticut. There were nine parties directly interested in it besides four or five other concerns more or less intimately connected.

In 1887 the nine parties mentioned entered into an agreement with the corporation. Each bound his concern to surrender to that company each month a sworn statement of the number of

⁴⁶ Contract, *Report of the Committee on General Laws on the Investigation Relative to Trusts*, N. Y. Sen. Doc. No. 50, (1888), pp. 609-617; and the testimony of the commissioner of the pool, *ibid.*, pp. 601-608.

envelopes sold and delivered during the preceding month. Upon the returns thus made each member of the pool agreed to pay to the Standard Envelope Co. a tax of fifteen cents per thousand⁴⁷ except on such as were sold to other members of the pool.⁴⁸ Another agreement supplementary to this provided an arrangement for equalizing and keeping prices at a fixed rate and also for equalizing losses and expenses which might be incurred in so doing.⁴⁹ Failure to adhere was penalized. It is not known exactly how the payments made were cleared, but testimony shows that the manufacturers did not always take out the same amounts as they paid in.⁵⁰

The most peculiar of the pools using a clearing-house feature is without doubt the Addyston Pipe Company.⁵¹ In fact, this pool may almost be regarded as in a class by itself since its clearing arrangement and its auction feature in no way resemble the characteristics of any other pool. The organization was first formed on December 28, 1894, but the system adopted of having in the several states a fixed basis upon pipe lettings did not prove satisfactory, and was discarded in the following May. By a new system, all competition upon pipe lettings was to take place among the shops prior to the said letting. The six shops in the combination were to have a representative board located in some central city to which all inquiries for pipe were to be referred. The board fixed the price at which the pipe was to be sold. Bids were then taken from the different shops for the privilege of handling the order. The party who at this auction agreed to give the highest bonus for division among the others secured the contract.⁵²

The principal points of difference between the two pools next to be considered and the Oilcloth and Envelope combinations are in the form of the agreements. The St. Louis Granite Company was a corporation organized in 1891 by representatives of five concerns controlling all but a small percentage of the crushed granite sold in that city. The capital stock of the company was

⁴⁷ This tax varied from time to time and there is nothing to show whether it represented the amount realized above costs of production or not.

⁴⁸ *Op. cit.*, *New York Senate Trust Investigation of 1888*, pp. 468 ff.

⁴⁹ Testimony of J. Q. Preble, *ibid.*, p. 335.

⁵⁰ *Ibid.*, pp. 335.

⁵¹ The operation of this combination is so well known that the treatment has been made as brief as possible.

⁵² 85 Fed. 271. *Cf.* especially 273 ff.

\$2,000, divided into five shares, one of which was taken by each of the five representatives who had incorporated it. Each incorporator endorsed upon his share the statement that it was held in trust for the concern of which he was a member.

Each of the five concerns executed a contract with the Granite Company, by the terms of which it agreed to sell and deliver to that organization, for a period of five years, at certain specified prices, its entire crushed granite output. In return, the St. Louis Crushed Granite Company agreed in each contract to pay cash for the granite and to order from time to time, of the entire quantities of granite which it needed, an amount equal to the numerical proportion which each particular contract bore to the whole number of like contracts. Apparently, therefore, we have joint-sales and output division. How far this was from being the actual case is shown by the report of the referee in the suit arising out of these contracts. In regard to the quota provision mentioned above, it was not shown that the Granite Company ever made such a call. Furthermore, the five concerns sold exactly as they had prior to the company's formation, except that it was understood that sales were to be made in the name of the company. The company received the reports of sales, entered them in its books and collected the money accruing therefrom. It also *fixed prices*. These things, the referee found, constituted the only business that the company was supposed to transact. The dividends which were declared were received by the incorporators. Hence, though apparently organized for joint selling and dividing output, the organization in reality served as a clearing house and to fix prices.⁵³

The Continental Wall Paper Company is another organization in which the text of the agreements is misleading. The basis of the combination was several separate contracts, each entered into by one of the manufacturers of wall paper (known as the vendor) with the Continental Wall Paper Company, a corporation of the state of New York with an authorized capital of \$200,000 divided into 16,000 shares. It is probably unnecessary to state that the Continental was organized by certain large manufacturers of wall paper. By the terms of the contract each vendor manufacturer agreed to purchase a certain number of the 16,000 shares of the said stock. Although the agreement itself does not reveal the fact, it appears from the opinion of the court that each manu-

⁵³ 86 S. W. 213.

facturer bought these "in proportion to the product of the year before the combine took effect." The stock certificates thus acquired were endorsed in blank to the company to be held in trust to secure the performance of the agreement. On failure to perform, the stock could be sold, the proceeds being regarded as the liquidated damages of non-performance.

The vendor manufacturer further agreed to sell his entire output to the Continental Wall Paper Company at a certain fixed scale of prices and the company agreed to resell to jobbers the goods so acquired, also at fixed prices. Each jobber was required to sign a contract with the company for exclusive purchase and the maintenance of specified prices. In return jobbers were classified into first, second, and third-class jobbers, each group being allowed certain preferential discounts from list prices, the discount varying with the expensiveness of the product. To the purchasers not classified as jobbers, manufacturers might sell in their own names, but for the account of the company and at prices known as "road prices" which were the equivalent of the full list prices from which jobbers were allowed preferential discounts as described above. On such sales the manufacturer was allowed the same discounts as were given to second-class jobbers. The fixed prices at which the vendor manufacturers were supposed to sell to the Continental were the cost of production with a sufficient amount added to cover incidental expenses merely. The difference between these prices and those exacted from jobbers or others constituted the profits of the combination, which were distributed as dividends to the shareholders of the Continental Wall Paper Company. While apparently a joint-sales feature, such was not in reality the case, despite the wording of the contracts. This was because, as Mr. Justice Harlan put it: "In reality, the agreement was, and so the business was carried on, that the manufacturers should maintain sample rooms and selling agents, and should solicit and receive orders from all wholesalers, whether jobbers or so-called 'Road' or 'Quantity Buyers'; *that the entire business should be done by so-called vendors*, but payments should be made by jobbers to the so-called company, and by wholesalers, other than jobbers, directly to so-called vendors."⁵⁴

Joint-sales and output division.

The Chesapeake and Ohio Fuel Company was employed as

⁵⁴ 212 U. S. 243; 148 Fed. 939 ff. Italics are the writer's.

joint-sales agent by the Chesapeake and Ohio Coal Association in the latter part of 1897. The Coal Association was composed of several concerns, all of them miners and shippers of coal, and part of them makers and shippers of coke upon the line of the Chesapeake and Ohio Railway in West Virginia. The agent agreed and covenanted to sell for western shipment by rail and to pay the Coal Association for not less than 600,000 tons of coal per annum and 75,000 tons of coke.⁵⁵ Not later than the twentieth day of each month the executive committee of the Coal Association designated the percentage of total product of each grade of coal and coke which they thought might best be shipped by each member during the succeeding month. This apportionment was turned over to the joint-sales agent—the Fuel Company—which distributed the orders received according to the apportionment. The agent also made and rendered to the Coal Association daily reports of sales and the net prices thereof, also a monthly report showing tonnage weighed and shipped or weighed only, together with average price. The average price is not to be clearly understood until it appears that the executive committee of the Coal Association fixed from time to time the minimum price of coal. Below this price the sales agent was not to sell. As commission on the sales effected, the Fuel Company received ten cents per ton. This sum was known as gross profit and the average price above referred to was computed upon the basis of the actual price less the gross profit and minimum price as established. According to this average price the joint-sales agent paid the members of the Coal Association for the coal and coke sold.

In spite of this arrangement the Coal Association cannot fairly be regarded as a price pool. The minimum prices were fixed, it is true, but a clause in the agreement expressly provided that the Fuel Company should at all times endeavor to secure the maximum price for coal and coke. In the judgment of the writer, therefore, the minimum price clause cannot properly be regarded as subjecting this pool to triplex classification.⁵⁶

The Pocahontas Coke Company resembles very closely the Chesapeake and Ohio Fuel Company. The former was organized by some twenty coke-producing and manufacturing corporations in the Pocahontas Flat Top Coal Fields of West Virginia, in

⁵⁵ With sundry exceptions under certain conditions.

⁵⁶ 105 Fed. 93 ff. and 115 Fed. 610 ff.

accordance with a general agreement entered into on the 29th of June, 1905. Among other objects, the company was "to regulate, improve and standardize the quality of coke manufactured."

The method by which these ends were accomplished was as follows: Each manufacturer executed a contract with the company constituting the latter its sole sales agent and agreeing to pay to it a commission of five cents per ton on all sales of coke. The Coke Company, on its part, guaranteed each manufacturer payment for his coke at the average price for all coke passing the weighing scales each month. Each manufacturer was entitled to subscribe for one ten-dollar share of the \$150,000 of capital stock of the Coke Company for each coke oven owned. The stock, however, was at all times to be held and retained by three trustees, elected by a majority of the parties. Apparently, this was merely to prevent a transfer of interest, as it was expressly provided that the voting power should remain in the hands of the stockholders.

The general agreement provided that the parties were to keep such ovens burning as would supply their respective proportions of the sales of coke made by the company. From a provision in the individual contracts signed by each manufacturer, it would appear that the basis of these proportions was that which the number of ovens owned by each manufacturer bore to the total number of ovens.

The Coke Company was to be managed by a general manager who was required not to be interested in any coke operations or plant and was to sell at the best possible market prices. After the payment of the operating expenses of the Coke Company, any surplus was to be distributed as dividends upon the stock, "each stockholder to have the same proportion of such surplus as the number of tons of coke furnished by him or it bears to the whole number of tons of coke furnished to said company for sale."⁵⁷

Price and legitimate trader.

The Coal Dealers Association of California was organized in 1896 as an unincorporated association composed of the retail coal dealers in the city of San Francisco. In article 1 of the constitution appears the statement that: "It shall have for its object the furnishing of information to its members . . . and also the names of any dealers who have been guilty of violating

⁵⁷ 56 S.E. 264 ff.

any of the *rates*⁵⁸ or rules made from time to time." Besides this provision in regard to prices a "legitimate trader" feature is introduced into the combination by section 14 of the by-laws which was the text of an agreement executed by the Coal Dealers Association with the various wholesalers of the city and county of San Francisco. By this the wholesalers pledged themselves not to "sell coal at trade rates to any one not having an established yard" nor to sell "at less than card rates to consumers."⁵⁹ The enforcement of the card rules and rates of the retailers' association was practically left in the hands of the wholesalers.

Upon receiving proof from the Coal Dealers' Association of the violation by any retail coal dealer of any of the rules of business printed on the rate card issued by said association and being satisfied that the charge is established, said wholesale coal dealers agree, and each of them agrees to, and will, charge the dealer so violating said rules or rule consumers' rates thereafter for coal, until said retailer dealer, if a member of said association, shall have been reinstated to membership in the Coal Dealers' Association of California by vote of the board of directors of said association, or, if not a member, until he shall have paid such reasonable penalty as may be imposed upon him by said association.

Following this clause is one prescribing the rates and rules to be enforced.⁶⁰

Joint sales and price.

The Chicago Paving Brick combination, alleged to have existed from 1907-1910, used an individual as joint-sales agent instead of an association or incorporated company. This is in contrast to all the other combinations having the joint-sales feature which this article considers. There were three concerns in the combination for which the individual sales agent acted. From time to time the officers of the three companies met and agreed¹ upon prices which were transmitted to the sales agent.⁶¹

Territorial and output division.

The available sections of the international agreement of the Aluminum Company of America indicate a combination for territorial and output division. Entered into sometime in 1908 the agreement provided that the European concern should not

⁵⁸ Italics are the writer's.

⁵⁹ The last with certain exceptions.

⁶⁰ 85 Fed. 252 ff.

⁶¹ *U. S. v. D. V. Purington*, Indictment No. 4515, U. S. D. C. for the Northern District of Illinois, Eastern Division. Typewritten carbon of original, pp. 2-4.

sell in the American market (North and South America except the United States and including also West Indies, Hawaii, and the Philippines), the Northern Aluminum Company, the subsidiary of the Aluminum Company of America, reciprocating in the European market. Having laid down these territorial restrictions, the two parties then divided deliveries in the European market, 75 per cent to A. J. A. G. the European concern, and 25 per cent to the Northern Aluminum Company. In the American market the delivery percentages were reversed while each party was to have 50 per cent of the common market, presumably the rest of the world outside of American and European territory, except that sales in the United States were reserved to the Aluminum Company of America, as were certain foreign government sales to A. J. A. G.⁶²

Joint-sales and output curtailment.

The General Paper Company shows the joint-sales pool in a most complex form. It was a corporation of the state of Wisconsin organized about May, 1900, with a capital stock of \$100,000. The parties at interest were several large manufacturers of pulp and paper in the states of Wisconsin, Minnesota, and Michigan. It was alleged that the capital stock was divided into 1000 shares which were distributed among the members of the combination in proportion to output. By its articles of incorporation the General Paper Company was authorized to become sales agent for any and all kinds of paper and paper products and merchandise manufactured therefrom. The mills then proceeded to contract with the General Paper Company constituting it their joint-sales agent. Apparently it was not a price pool as the price of paper seems to have been fixed by the General Paper Company and not by the parties behind the joint-sales agent. The General Paper Company also had the power to control and restrict the output of the mills. A further provision is interesting, being somewhat of a territorial division nature, though not enough so to alter the classification. This was a clause giving to the General Paper Company the power to designate the publishers and other customers which each mill should supply.⁶³

⁶² *U. S. v. Aluminum Company of America*, Petition in Equity, U. S. D. C. for the Western District of Pennsylvania, pp. 15-16. It should be borne in mind that this treatment is based upon only a few sections of this agreement.

⁶³ *U. S. v. General Paper Company*, Petition, U. S. C. C. for the District

Output curtailment and price.

The causes operating to bring into being the Western Export Association were similar to those that created the pool of the Kentucky Distillers—a large surplus of production.⁶⁴ A great export demand for alcohol about 1878 stimulated the building of distilleries. After 1882, however, there was a rapid decline in our export trade in alcohol. This was chiefly attributable to the fact that in that year the German government passed an act allowing German distillers a bonus or bounty amounting to about ten cents per gallon. This bounty enabled the distillers of that country to undersell us and practically drove us out of every European country. As a result, American distillers found themselves in the position of being able to produce about five times as much alcohol as the domestic market could absorb.⁶⁵ Out of this situation developed the Western Export Association. It was first organized in November, 1881, and it was re-formed at different times for different periods, generally to cover the winter months.⁶⁶ It continued until the formation of the Distillers and Cattle Feeders Trust in 1887. These pools used two methods of output curtailment. The first was the exportation of the surplus, which was done at a loss to the whole body, and at times ran as high as ten cents per barrel.⁶⁷ The second was the limitation of the distilleries to a certain percentage of full capacity.⁶⁸ From an article by Professor Jenks, it appears that at least some of these pools also fixed prices. Hence, the duplex classification has been given to this pool,⁶⁹ though the writer has no evidence that price fixing was always included in the program.

of Minnesota, Third Division, pp. 7-12. It is interesting to note that the General Paper Company is said to have entered into an agreement in 1902 with the Manufacturers' Paper Company, a corporation of New York which was alleged to be joint-sales agent for certain other manufacturers. The agreement claimed was territorial in character, the Manufacturers' Company agreeing not to compete with the General in Wisconsin or states west of the Mississippi.

⁶⁴ *Supra*, Kentucky Distillers Pool.

⁶⁵ Testimony of J. B. Greenhut, *House Committee on Manufacturers with Reference to Trusts*, H. Rept. No. 4165, 50 Cong., 2 Sess., 1888-1889, pp. 64-65.

⁶⁶ *Ibid.*, p. 83.

⁶⁷ Testimony of C. C. Clarke, *Report of the Industrial Commission*, vol. 1. p. 169.

⁶⁸ *Ibid.*, p. 168.

⁶⁹ Jenks, J. W., "Development of the Whiskey Trust," *Political Science Quarterly*, vol. IV (1889), pp. 296-319; reprinted in Ripley, pp. 22-44.

TRIPLEX POOLS

Clearing house, territorial division, and price.

While the prime purpose of the Explosives International Agreement of 1897 was to secure territorial division, the fact that for a certain portion of the territory prices were fixed by joint arrangement of the parties at interest and the profits from these transactions pooled, brings the agreement under the mixed form of classification. The agreement developed out of circumstances substantially identical with those which produced the international tobacco agreement, except that in the present case the foreign manufacturers were the aggressors.

In terms the agreement provided that for the sale of high explosives⁷⁰ the world should be divided into four territories. The United States and its possessions, Mexico, Guatemala, Honduras, Nicaragua, Costa Rica, United States of Colombia and Venezuela were made exclusively "American territory." Other countries in South America other than those mentioned, British Honduras and the islands in the Caribbean Sea not Spanish possessions were denominated "syndicated territory." The Dominion of Canada and Spanish possessions in the Caribbean Sea were designated as a free market unaffected by the terms of the agreement. The remainder of the world was to be the exclusive territory of the European factories and was to be known as "European territory." Clearing and price fixing related solely to "syndicated territory." The American factories designated a chairman and a vice-chairman while the European factories did likewise. From time to time the chairmen were to mutually agree upon a *base price* for each market in "syndicated territory" and likewise a *selling price*. The selling price was to be deemed a convention price below which no sales were to be effected. The difference between the base price and the selling price was syndicate profit to be divided equally between the American factories and the European factories.⁷¹

Joint sales, output division, and price.

The Blue Stone Association of 1887, though a joint-sales pool, differed from the Salt Association in several aspects, one of which

⁷⁰ It is important to bear in mind that the division of territory relates to high explosives and not to blasting and rifle powder.

⁷¹ Agreement, Government Exhibit No. 119, *op. cit.*, *U. S. v. E. I. du Pont de Nemours and Co.*, Petitioner's Record, Exhibits, vol. II, pp. 1123 ff. A digest of all these and other terms of the agreement will be found in the *Quarterly Journal of Economics*, vol. XXVI (1912), pp. 466-467.

was in the matter of fixing prices. As was pointed out in the discussion of the Michigan Salt Association, the fixing of prices which must naturally occur through the act of selling is not to be regarded properly as price fixing but as something incidental to the selling. In the Michigan Salt Association the price fixing incidental to the selling was outside of the control of the members of the association, who had arranged for that organization to handle their entire output or else had given it a lease of their plants. The Blue Stone Association employed a company known as the Union Blue Stone Company to market the product. This concern contracted as sales agent to make sales for the members of the association, so far as possible, of all the bluestone which the market would absorb for a period of six years from the date of the agreement. In contradistinction to the Salt Association, however, the Union Blue Stone Company was to sell only at prices fixed by the Blue Stone Association. Sales were to be apportioned between the members in certain fixed proportions of an aggregate of sales amounting to \$1,905,000, a quota to be increased or diminished according to the amount of sales. Each member of the association was to furnish his quota of stone as thus apportioned upon the request of the sales agent.⁷²

Clearing house, price, and output curtailment.

The Cotton Bagging combination of 1888 embraced eight concerns directly. L. Waterbury and Co., sales agent for the New York Bagging Co., was used as a clearing house for the pool. Waterbury and Co., of course, as agents for the New York Bagging Co. sold the output of that concern. Each of the other mills executed a contract with the Waterbury people which in terms purported to be an agreement to sell to the latter its entire output. The manufacturers were then to sell for the account of Waterbury and to pay over to that concern the proceeds of all sales after deducting a five per cent commission, interest, expenses, etc. According also to the terms of the contract, the prices of bagging were to be fixed by Waterbury from time to time. But an agreement made two days later between all of the eight parties provided that in the fixing of prices Waterbury should be governed by the votes of the majority of the parties

⁷² 15 N. Y. App. Div. 602 and 164 N. Y. 401. It is fair to say that this pool might at least indirectly operate to curtail output, but this would appear to be dependent entirely upon how much the market could absorb.

of the second part—in other words all the concerns except the Waterbury-New York bagging interests. Other clauses of the second agreement fixed arbitrarily the proportion of interest of each of the eight parties, the Waterbury-New York bagging interests constituting one party, in the profits and losses of the “common enterprise.” Finally, the agreement contained a clause requiring that the mills of the parties of the second part should be operated only to such an extent as might be decided upon by the majority of such parties.⁷³

Clearing house, traffic division, and price.

The combination which, for want of a better name, has been called the Pennsylvania Coal Pool, was organized on February 15, 1866. It is, therefore, one of the oldest American combinations. In the first place, the five parties to the agreement divided the entire quantity of coal to be shipped between two regions; one region to ship seventy per cent of the total, the other thirty per cent. Two of the five companies operated in the seventy-per-cent region and three in the thirty-per-cent, and the contract next provided that the parties in each region should subdivide among themselves the percentages allowed their respective regions.

The business contemplated by the agreement was to be controlled by an executive committee of three members who were to appoint a general sales agent. Each party to the agreement was required, at its own expense, to deliver its proportion of the different kinds of coal in the different markets at such times and to such parties as the committee might direct through the sales manager or otherwise. A general average of the sales of all the parties was to be made in order that each party should receive the same average price per ton at the common point. From time to time the *committee was to adjust the price of coal* for the different markets. Under the control and direction of the committee, any one of the parties might act as agent in selling coal, but only to the extent of its respective proportion. All other sales, so the agreement reads, were to be regarded as made by the committee through the general sales agent. This indicates a joint-selling arrangement as to a portion of the sales, as does the clause referred to above in regard to deliveries. Inasmuch, however, as

⁷³ Appendices A and B, *H. Rept.* No. 4165, 50 Cong., 2 Sess., 1888-1889, pp. 142-144; and also the testimony of Anderson Gratz, *ibid.*, 100-111. According to the testimony, the output curtailment clause was never enforced.

the companies are shown to have maintained agents and to have sold at least a large portion of their own output, it is to be questioned if the joint-selling clause was utilized to any extent. Therefore, the writer has not considered joint-selling a characteristic of the pool, though admitting that his decision may be open to question.

Three times a month the companies were required by the agreement to file with the sales agent statements of coal shipped and sold, or agreed to be shipped and sold. The sales agent furnished the committee on or before the tenth of the month a summary showing the entire quantity sold and shipped during the preceding month. Settlement was made between the parties on the basis mentioned above, *i.e.*, that each party was entitled to the average price for each kind of coal at each place of sale during the preceding month. The general sales agent then drew drafts upon those parties receiving more than the average price in favor of those receiving less. Failures to furnish the appropriate proportions of coal were to be adjusted equitably by the executive committee as between the parties. Presumably this was accomplished by the same method, namely, payments by those shipping more than their proportions to those shipping less.⁷⁴

Outside the Atlantic Conference already considered, two other steamship conferences or agreements are matters of public knowledge at the present writing. One of these relates to freight traffic to and from the United States and Asiatic ports; the other to freight traffic to and from the United States and the ports of Brazil. The two combinations are very similar in character. The former was organized in 1905 and the latter in 1908.

Each of these organizations had an agreement or agreements relating to the division of sailings between the participating lines in both directions. Thus, for example, the "Eastward Agreement" in the Asiatic trade, *i.e.*, Atlantic ports of the United States to Eastern Asiatic ports, divided a total of forty-one sailings among four companies. Two companies secured thirteen sailings each; the other two, eight and seven respectively.⁷⁵ Similarly in the Brazilian trade twenty-four sailings each were allotted to Lamport and Holt, the Prince Line and the combined Hamburg Lines,

⁷⁴ 68 Pa. St. 173 ff.

⁷⁵ Memorandum of Agreement, *U. S. v. American Asiatic Steamship Co.* Petition, U. S. D. C. for the Southern District of New York, Exhibit No. 1, pp. 27 ff.

from New York.⁷⁶ Besides these traffic agreements there existed in each case an agreement for the pooling of freights. In the case of the Brazilian trade the interest of each of the parties was in proportion to the number of sailings allotted. In the Asiatic Trade the method utilized was exceedingly complicated, too much so for adequate discussion here.⁷⁷ In each case a central office was maintained at which the pooling records were kept and the various accounts made up from time to time. In both trades provision was also made for the fixing of rates. In the Asiatic trade this clause is found in the traffic agreements. In the Brazilian trade it appears in the pooling agreement.

QUADRUPLIX POOLS

Clearing house, output division, price, and output curtailment.

So far as the information is obtainable, the Wire Nail Association appears to be the most complicated of the pools with which this article deals. Primarily for clearing sales the pool appears, however, to have divided and limited output and also to have fixed prices. First organized in 1895, this combination established prices from a Pittsburgh base adding freight to destination. Profits above the cost price were paid into the pool and were cleared monthly (after paying expenses) upon a certain agreed basis which was the same as that upon which the agreed production was apportioned. This basis was determined partly by the sales for months before the pool was formed, partly upon the production in one of those months and partly upon capacity as indicated by the number of machines. Both prices and output were determined a month in advance.⁷⁸

The writer hopes he has proved that there are striking resemblances and a considerable uniformity in these pools and associa-

⁷⁶ Memorandum of Agreement, *U. S. v. Prince Line, Ltd. Petition*. In Equity, U. S. D. C. for the Southern District of New York, Exhibit No. 1, pp. 22 ff.

⁷⁷ Agreement, *op. cit.*, *U. S. v. American-Asiatic Steamship Co.*, Exhibit No. 3, pp. 38 ff., and Agreement, *op. cit.*, *U. S. v. Prince Line, Exhibit*, No. 2, pp. 25 ff.

⁷⁸ Egerton, C. E., "Wire Nail Association of 1895-1896," *Political Science Quarterly*, vol. XII (1897), pp. 246-272, reprinted in Ripley, pp. 46-72. It is interesting to note that the gentleman who engineered this association also organized the more recent Fibre and Manila Association and the Paperboard Association. Facts accessible are not sufficient to allow discussion of these pools. Available information leads one to think that the pooling plan of these two associations was very similar to that of the Wire Nail Association.

tions. In conclusion, it is evident that the pool is far from being a discarded form of organization. In view of the numerous pools of comparatively recent date, one is almost tempted to believe that this form of organization is more utilized than ever before in our history. If this be so, some estimates of the pool as an unsatisfactory type of combination ought to be revised.

WILLIAM S. STEVENS.

Columbia University.

POSSIBLE COMPLICATIONS OF THE COMPENSATED DOLLAR

In discussing Professor Irving Fisher's most ingenious plan for a dollar of stable purchasing power, there seems to be some confusion as to what virtues are claimed for the plan and what are not; and Professor Kinley's recent article on the subject¹ bears traces of this confusion. The advocates of the plan do not claim, for instance, that it would prevent any one commodity or class of commodities from rising or falling in price relative to others, but they do claim that it would remove the cause that has given us the strange phenomenon of falling prices for bonds and rising prices for everything else, so that the most conservative have suffered while those who took risks have gained. It would not mend the lamentable inequality in the sharing of this world's goods, but it would lessen or stop the shrinkage in the buying power of fixed incomes. It would not prevent a falling off in the productive power of the human race if the law of diminishing returns decrees such a falling off, but it would tend to prevent business men as a class from being in ignorance whether their profits for the past year are due to superior efficiency or merely to the fact that their outgo in wages and interest has not yet caught up to their income, as prices take their upward course.² In the one case he who is making such gains should expand his business; in the other case to do so would sow the seeds of panic. Would not business be sounder and ultimately more productive with the second kind of profits eliminated?

The proposed standard of value is, to be sure, not ideally perfect. To gain perfection, we should have to create a standard that would run in terms of human efforts rather than in terms of mere commodities. But compared with gold alone, the standard based on index numbers would come so much nearer perfection, that it is well worth striving for.

The following study is a friendly search for practical difficulties in the proposed plan, in which the main contentions may be summarized as follows:

I. Under Fisher's plan a rise in the redemption weight of the dollar carries with it automatically a shrinkage in the redemption power of the gold reserve.

¹ AMERICAN ECONOMIC REVIEW, March, 1913, p. 1.

² See Irving Fisher, *The Purchasing Power of Money*, ch. 4, especially p. 63.

II. If the plan were adopted universally, so much gold would be thrown on the bullion market that its value would probably fall between one half and one third, provided the production of gold were to shrink between one third and one half in response to the fall in value. Otherwise the fall might be still greater. To keep prices steady under these conditions would call for much quicker changes in the weight of the dollar than Professor Fisher's plan contemplates. The crux of this proposition consists of an empirical study of the elasticity of the industrial demand for gold, the results of which are used in the course of the argument, while the full calculations will be found in the appendix at the end of this article.

III. If the plan were adopted by an international agreement among nations holding two thirds of the world's gold money, the resulting fall in value would be spread over a term of ten or fifteen years, and would not amount to more than twenty-five or thirty per cent from this cause alone.

IV. Gradual adoption by one country after another would place the heaviest loss on the governments that were first to make the change.

V. Two further possibilities are to be noted.

(1) The gains that Professor Fisher expects to accrue to the government from the operations of issue and redemption might be turned into losses if the changes in the value of gold were long continued.

(2) The governments would ultimately be forced into the bullion market to replenish their reserves, a policy which would present its own difficulties of administration.

Let us take up these propositions in detail.

One point which has been much neglected is the matter of the gold reserve which must be held to ensure redemption of the proposed currency, as of all other forms of credit money. Now the gold reserve under this scheme would be in a most novel position. When the United States issues gold certificates, all it has to do is to keep under lock and key the gold paid for them and be sure of a reserve always equal to 100 per cent of the claims against it. But under the new system, every time the redemption weight of the dollar is raised, every ounce of gold in the vaults will be able to redeem fewer dollars than before, so that there will be an automatic shrinkage in the ratio of assets to liabilities of that department of the Treasury which has to do with the issue and redemption of currency.

At present the available gold, both in the Treasury and out, amounts to some 64 per cent of all the government currency, including silver dollars and certificates whose value may be regarded as really resting on the gold reserve. Let us suppose, for the sake of simplicity, that we start by exchanging all our outstanding government currency for certificates and tokens of the new sort and that all the gold remains in the issue department of the Treasury. The natural result would be a gold reserve of about 64 per cent of all the claims against it.³ If the silver bullion were gradually sold and the proceeds turned over to the issue department, this reserve might be increased by almost 10 per cent, although some of this silver would in any case be kept to be coined into dimes, quarters, half-dollars, and even perhaps dollars, so far as these may be demanded in certain sections for pocket-change.

Let us say, then, that we start with a gold reserve of 70 per cent, a figure which gives the Treasury the benefit of the doubt as to the marketableness of the silver bullion. Now if, in the first year, prices of commodities in terms of gold rise 3 per cent and the redemption weight of the dollar is raised accordingly, this reserve will automatically have dwindled to a trifle less than 68 per cent, by the increase in the amount of gold the holders of currency are entitled to demand; and if the value of gold were to fall 50 per cent so that the gold content of the dollar had to be doubled and no further currency were minted in the meantime, the gold reserve would then stand at 35 per cent, though containing as many ounces as before. Any currency that might have been minted at values between 26 grains per dollar⁴ and 52 grains per dollar, would have increased the gold reserve somewhat and so have had a mitigating effect on the reserve ratio; but this relief, for reasons to be given below, may be expected to be but slight, and may even be ultimately turned into an actual source of loss.

Under such conditions the Secretary of the Treasury might share some of the uncanny sensations of Alice in the Looking-glass Country, racing with the Red Queen, for it would take some running to stay in the same place. Not that the United States

³ Based on *Report of the Director of the Mint*, 1910, p. 55, disregarding bank notes and counting as outstanding all money except the assets of the issue department of the Treasury.

⁴ The figure obtained by taking the weight of the recent dollar, 25.8 gr. and adding the proposed brassage charge of 1 per cent is 26.058 gr.

Treasury is not strong enough to maintain its *status quo* if it chooses, but it would be forced either to buy bullion in the market, paying for it out of current revenues, to replenish the fund, or else to see it lie physically intact but financially dwindling with every fall in the purchasing power of gold.

It is suggested that we will need no large cash reserve,⁵ and it is urged in support of this that those countries which have tried the gold-exchange standard have found no large gold fund necessary to support the value of their silver coinage. But it must be remembered that in these cases the redemption value of the coin was fixed at a point but little higher than its bullion value, so that every coin redeemed represented an income of silver bullion almost as great as the outgo in gold drafts; and the true bullion reserve, including the market value of that in the coins themselves, is very big indeed. The gold reserve that is sufficient under these circumstances is no criterion of that necessary to support a currency which has no bullion value.

For purposes of discussion, all the available gold has been counted in the cash reserve. If some of it were to remain in circulation as coins (converted into tokens), the fundamental situation would be unchanged, but the gold remaining in the Treasury would appear as a smaller percentage of the number of dollars outstanding, and so the situation would not be relieved by this policy. It would seem that in the matter of gold reserve we should rather be guided by the experience of gold-standard countries in their use of credit money, always remembering that there is a bank note and bank credit system to be superimposed on the governmental currency. Judging by this standard, we should keep a large specie reserve.

If every rise in prices of commodities, measured in gold, means a weakening of the reserves, it is of some interest to estimate the probable or possible future increase of such prices. According to Professor Fisher, they are "almost sure to continue to rise in the next decade or two, probably as fast on the average as 2 per cent per annum," while "no upper limit is assigned to the possible rate of rise."⁶ This under existing monetary systems; but under the new system gold will depreciate faster, through the flooding

⁵This was written before seeing Professor Fisher's statement of 50 per cent as a prudent reserve. *AMERICAN ECONOMIC REVIEW*, Supplement, March, 1913, p. 49.

⁶*AMERICAN ECONOMIC REVIEW*, vol. II (Sept., 1912), p. 557.

of the industrial bullion market with gold no longer taken by the mints, as Professor Fisher himself states.⁷

How far, under such circumstances, would gold depreciate? Obviously, the answer depends, among other things, on how widely the scheme is adopted. In trying to make some calculation of the probabilities, the simplest way is to start on the heroic assumption that the whole world adopts the plan, and then to work backward to the milder effects of partial adoption. Part of the evidence used will be Professor Fisher's own calculations of the equation of exchange, and whether the reader believes these to be true or not, he must admit that their use does no injustice to Professor Fisher. The results of this inquiry may be presented in the following propositions.

(1) If the plan is successful in maintaining the existing price level, this will mean that the increase of the world's money supply will have ceased, or almost ceased. According to Professor Fisher's calculations, the probable growth in the rapidity of circulation of money and especially in the scope and efficiency of banking operations in the next ten or fifteen years will be sufficient to carry on the world's trade at the existing price level without any addition to the money supply.⁸ To have maintained a steady level of prices in the United States from 1896 to 1909, would have required an increase of but \$90,000,000 in the money supply, instead of the actual increase of \$730,000,000.⁹ If these figures are correct, we may safely conclude that either (a) the cash reserves would not be replenished by any great amount of new gold brought in to exchange for an increased amount of credit dollars, and pretty nearly the entire gold output would find its way to the industrial bullion market, or else (b) the money supply would go on increasing, prices would go on rising, and the plan would, for the time being, fail of its object.

(2) When the plan succeeds in steadying prices, enough gold bullion will have been diverted into industrial uses to treble, approximately, the supply in this market (leaving out of account for the time being any possible shrinkage in gold mining). For the bullion market will get the whole, or practically the whole, of the world's output, instead of absorbing only one third as heretofore.¹⁰

⁷ *Quarterly Journal of Economics*, vol. XXVII (Feb., 1913), pp. 394-396.

⁸ *AMERICAN ECONOMIC REVIEW*, vol II, p. 553, line 2 of table shows money and prices increasing at the same rate.

⁹ Based on table in Fisher's *Purchasing Power of Money*, p. 304.

¹⁰ Figures of the world's gold production and industrial consumption in

(3) The elasticity of the industrial demand for gold is such that trebling the supply may be expected to reduce the value to about one third its former level. This proposition is, of course, vital to the whole argument, but the detailed calculations that lead to it would burden the reader with a long digression if they were introduced here. Suffice it to say that, after estimating the normal growth of gold consumption, apart from the effect of price changes, the variations of actual gold consumption from the estimated normal rate are found to correspond very closely to changes in its general purchasing power. When prices rise, gold consumption is stimulated, and vice versa, and the changes in the index number of prices are on the average 1.03 times as great as the corresponding changes in gold consumption, the observations covering a period of thirty years, including both rising and falling prices. The entire calculation will be found in the appendix at the end of this article.

(4) Allowing for possible shrinkage in gold production as a result of the fall in the value of gold, it seems probable that the bullion supply would still be increased 50 to 100 per cent, so that gold would lose from one third to one half of its value. If the value of gold falls very suddenly and sharply the least lucrative mines will be forced to close down. Just how much the value of gold must fall before the point of equilibrium would be reached can only be conjectured. Perhaps the mining experts could tell us whether as much as two thirds of our present output could still be maintained if the purchasing power of each ounce were suddenly cut in two, or whether the output would shrink to half its present volume if the value were reduced one third. In either case, equilibrium would be established. If the output of the mines were to shrink one third, the supply of industrial bullion would be only doubled, not trebled, and its value would be reduced only one half. And if gold production should prove so sensitive as to shrink one half, the industrial supply would be increased only about 50 per cent, and the value of gold would fall only one third. To one who is not a mining authority, the former estimate seems more probable.

What would be the effect of this on the gold reserve? In place

Reports of the Director of the Mint. For a long term of years industrial consumption has accounted for about one fourth of the world's output. The figures for 1909 and 1910 show a sudden increase to more than one third in 1910, owing to the inclusion of an estimate of oriental absorption. The latter is hard to classify either as coinage or as industrial use.

of the 70 per cent with which we started, we should have left something between 35 and 47 per cent. This might perhaps be considered large enough, although prudence would dictate somewhat more. Else why is not the United States seriously tempted to turn an honest penny by replacing all its gold coin and certificates with greenbacks at their present legal gold reserve ratio of approximately $43 \frac{1}{3}$ per cent?¹¹

Barring the disastrous effect on an established industry, and the possible loss of confidence in the governmental cash reserves, there is much to be said for this outcome. The gold miner would then know that all his output was increasing the sum total of human benefits and gratifications, whereas at present the thoughtful members of this great profession must be much troubled by the realization that only one ounce out of every three they mine is destined to make the world happier or more beautiful, while the other two will merely swell the volume of the world's currency and aggravate the fall in the purchasing power of the standard of value.

The reader will recall that the foregoing discussion is based on the assumption that the whole world adopts the plan. Of course, that is the ultimate goal to be sought for if the plan is to be adopted at all, since partial adoption would seriously hamper trade by dislocating the rates of international exchange. Reasonably good results might be obtained, however, by a coalition that should include, say, the English-speaking countries, the countries of the Latin Union, Germany, Austria-Hungary, and the Netherlands—countries which possess between them about two thirds of the world's gold coinage. Countries now on a gold-exchange standard could ally themselves to such a union with comparatively little trouble, especially since the bullion value of their silver coins could hardly fall as fast as that of gold, and measured in terms of gold it would actually rise.

How would the value of gold behave under such an alliance? In the first place, the downward effect of the plan would be much delayed in its action, for the gold coinage of the outside nations would be able at first to absorb most of the gold output and keep it off the bullion market, and it might take some ten or fifteen years to fill up this reservoir. What would happen at the end of this period one can hardly venture to predict, even tentatively,

¹¹ \$150,000,000

\$346,681,016

Since writing the above I find that Professor Fisher has suggested 50 per cent as a proper reserve. See *AMERICAN ECONOMIC REVIEW*, Supplement, March, 1913, p. 49.

but it is safe to say that the downward effect on the value of gold produced by the new currency plan, apart from other disturbing influences, would be proportionately less than if the scheme were universal, perhaps 25 or 30 per cent. This estimate is over and above the probable fall in value due to causes apart from changes in the currency system, a fall which Fisher estimates will be enough to raise prices 2 per cent per year or more, as we have already seen. Summing up these estimates, it is conservative to conclude that at the end of ten or fifteen years of such partial adoption of the new currency scheme as is here assumed, gold would be worth not more than about 63 per cent as much as it is now, nor less than 50 per cent. This amount of disturbance is quite substantial, but not alarming. It would call for the most serious consideration, though it need not prove a fatal obstacle to success.

But there is another point which should furnish some food for thought to those who expect the plan to be adopted first by a few nations and then to spread to the rest. For the very reason that the drop in the value of gold would be gradual, it would fall heaviest on those governments that were first to take up the burden of maintaining the value of money independent of that of bullion, and the last to come in would suffer the least loss; just as the United States, having early stopped the free coinage of silver, has the burden of maintaining its "standard" silver at a far greater premium above its bullion value than do the Philippines and Panama, which only recently undertook the task.

So far no mention has been made of the possible gain or loss to the government in the minor ebbings and flowings of gold and currency into and out of the Treasury. It is urged that these would be a source of profit because of the fact that the government would at any time offer to pay fewer dollars for a pound of gold than it would offer to redeem with the same pound of bullion. This conclusion the writer is inclined to doubt, since some movements of the value of gold are liable to last over several of the readjustment periods the plan provides for, and to be checked at length by redeeming a considerable amount of currency, giving more gold for it than was gotten in exchange for it at the original mint price of gold. Or, if the movement were in the other direction, it might not be checked till we had bought a good deal of bullion with currency at a mint price higher than the redemption price that formerly prevailed, when the corresponding bullion was sold for currency.

For instance, if the value of gold falls anything like as fast as the foregoing study indicates, it may take years for the adjustment of the mint price to catch up and bring prices of commodities back to their former level. Meanwhile much currency will have been issued in exchange for bullion at, say, from 27 to 40 or 45 grains to the dollar, most of which will have to be bought back at or near the higher level before the rise in prices can be checked. This would mean a very substantial loss of gold to the Treasury, and would also aggravate the fall in the bullion market. Any long continued movement of gold values offers a chance of loss to offset the chance of profit from fluctuations of shorter duration.

One further possible outcome of the plan is that the governments might step in and buy gold out of current revenues in order to maintain their own specie reserves both directly and by lessening the rise in the bullion value of the dollar. Incidentally, this policy would mitigate the disturbance and possible crisis in the gold-mining industry. If such a policy were to be followed it would be best to govern the purchases by some rigid rule, or else the political pressure of private interests might have unfortunate results. Purchases at a certain rate per month might be prescribed whenever the ratio of gold reserves to redemption liabilities should fall below a given minimum.

The writer presents these speculations as one who believes in the general principle of Professor Fisher's plan, and in the importance of correcting the disturbances that are brought about by changes in the value of gold. Therefore, he wishes the plan to have the benefit of the fullest discussion of its possible results and of the complications that would be sure to attend its adoption.

J. M. CLARK.

Amherst College.

APPENDIX

The Bullion Market and Prices: an Inductive Study of Elasticity of Demand.

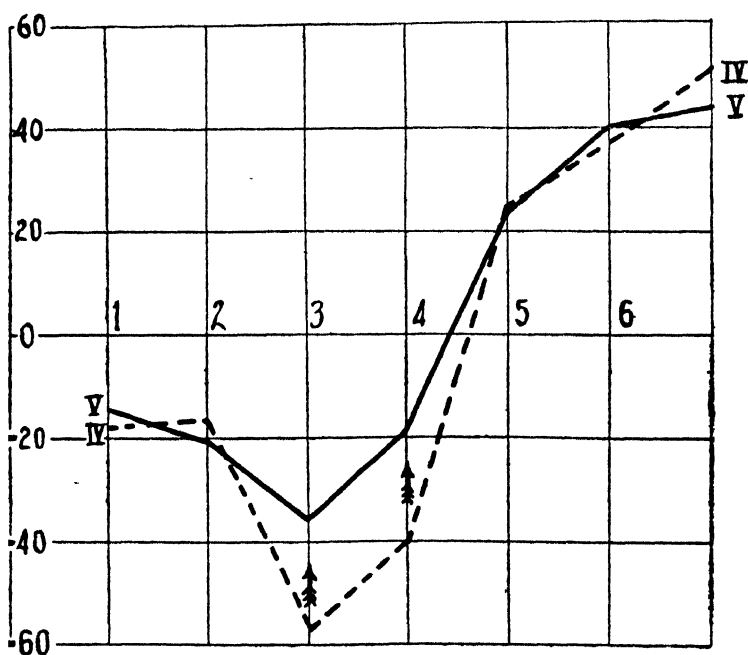
How elastic is the demand for gold for industrial uses? In a general way the increase in the annual industrial consumption of the world appears roughly to keep pace with the increase in the total stock of gold money. From this we may infer, approximately, that any given percentage increase of the rate of industrial supply would have the same effect on the value of gold in this market as an equal percentage increase in the total stock of money would have on its purchasing power, since the values of gold for these two uses go hand in hand.

This conclusion is borne out by such statistical calculations as limited

time has permitted the writer to make. The results of these are shown in the table below. The dates of the observations were chosen with a view to getting periods both of rising and of falling prices (falling and rising value of gold bullion, respectively) undisturbed by panics and depressions, to which the industrial demand for gold is supersensitive. Thus the fifth period reaches from crest to crest of an industrial wave, and the sixth and seventh extend from trough to trough of the same wave. The third and fourth periods are largely spoiled as evidence because they begin in a fairly normal time and end in the depression that followed the panic of 1893.

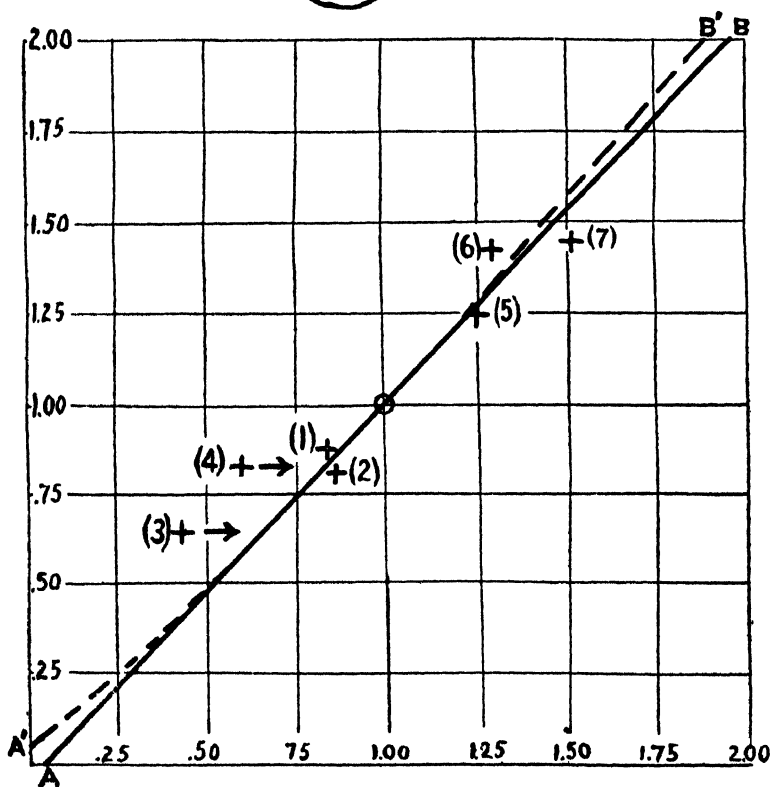
To isolate the effect on consumption produced by changes in value from that produced by growth of population and change in the people's standards of consumption, we must get some idea of the normal rate of growth, and the first two columns are devoted to this task. Column 1 shows the growth, during each period, of the consumption of eight commodities, seven of them being raw materials of manufacture and the eighth fermented liquors. But the use of gold has not grown as fast as that of these eight commodities over long periods, and it is impossible to say just how fast it has grown, apart from the effects of price changes, for there are no two dates far enough apart, which show the same levels of prices and the same states of business activity. But making rough allowance for unavoidable discrepancies, it seems fair to say

PART I



that the normal growth of gold consumption over the whole period is about four fifths as great as that of the eight commodities considered.¹² And accordingly the figures in column 2 are simply four fifths of those in column 1. Column 4 represents the percentage difference between the actual consumption at the end of each period and the amount that would have been consumed if the rate had grown normally. And, finally, column 6 measures the thing we are after, the degree of correspondence between the figures of column 4 and those of column 5—between the rate of consumption of gold and the reciprocal of its value.

CHART II



Note to chart

Percentage deviations in consumption measured horizontally from unity as a starting point. Corresponding percentage changes in price level measured vertically, from unity as a starting point. Arrows show direction of correction for known flaws in data. Dotted line indicates probable way in which actual demand curve deviates from the straight line $y = 1.03x - .03$, which represents the geometrical average of the five most valid observations.

Period taken	1 Increase in consumption of 8 materials during period	2 Assumed normal increase in industrial consumption of gold	3 Actual increase in industrial consumption of gold	4 Deviation of actual consumption at end of period from what it would have been had it grown normally ¹	5 Change in price level during period	6 Ratio of 5 to 4
	Per cent	Per cent	Per cent	Per cent	Per cent	
1. 1880 to 1892	92.8	73	40	-18	-14.3	.817
2. 1882-3 to 1892	71.7	56	29	-17	-20	1.18
3. 1882-3 to 1897	98.0	78	-19.4	-53 ²	-35	.60 ³
4. 1892 to 1897	9.5	7.6	-37.2	-41 ²	-17.8	.43 ³
5. 1892 to 1907	101.8	81	126	+25	+24	.96
6. 1894-5 to 1908-9	103.4	83	136	+28	+41	1.46 ⁴
7. 1894- to 1908-10	110.6	88	183	+50.5	+44	.87 ⁴

The data for column 1 are taken from the *Statistical Abstract of the U. S.*, those for column 3 from the reports of the Director of the Mint, and those for column 5 by combining the index number on p. 304 of Irving Fisher's *Purchasing Power of Money* with that on p. 141 of Kemmeyer's *Money and Prices*.

¹ For example, in line 1, $\frac{100 + 40}{100 + 72} = .82$, or 1 — .18.

² Depression in 1897 aggravates this negative deviation.

³ Figure too low, for reason given in note 2.

⁴ The difference between the last two readings in this column, covering practically the same period, is due to the fact that the falling off in consumption following the panic of 1907 was practically all felt in the year 1908. Measured by a two-year average the 1907 panic produced more disturbance to gold consumption than that of 1897, while if spread over a three-year average the later disturbance is less than the earlier. Both figures are therefore included.

Considering the rough nature of the observations, the correspondence between columns 4 and 5 is remarkably close, especially when one notices that the three greatest deviations are directly explained by known disturbing elements in the data. This correspondence is still more striking when shown graphically (chart I), the arrows indicating the direction of the correction needed to counteract the effect of known flaws in the observations, as shown in the comments on the table.

The simple average of all readings in column 6 of the table, good and bad together, is .9 and the median of the five most valid readings is .96, and their geometrical average 1.03, while in the period of rising prices the most moderate price change is 87 per cent of the corresponding deviation in consumption, and the geometrical average of the three is 104 per cent.

Another graphic illustration (chart II) shows by the dotted line A'B' the direction and general character of the probable demand curve that is indicated by these observations. The upward curvature of this line is deduced, not so much from the position of points 3 and 4, which are admittedly wrong, as from the following facts: (1) If the value of gold were to increase indefinitely, consumption would cease somewhat before its value reached infinity (and prices reached zero). Hence the curve starts from a point on the y axis slightly above the origin. (2) If the supply of gold were to increase indefinitely, it would ultimately become a free good and consumption would somewhere reach its maximum limit. Hence the curve ends by becoming vertical, prices of goods in terms of gold going to infinity. According to this diagram, the gold prices of goods should be more than trebled by trebling the supply of industrial bullion in the way suggested in the foregoing article.

J. M. C.

¹² A widely different value for this factor would make the results for periods of rising prices show discrepancies from those for periods of falling prices, but would have practically no effect on the geometrical average of the two sets of periods.

MONOPOLY AND COMPETITIVE PRICES

Public policy toward the trusts in the United States has been and continues to be characterized by a marked difference of opinion. On the one hand we have those who believe that competition as a general regulator of industry has broken down and that, indeed, it is more or less "inevitable" that competition should break down, because it is believed to contain within itself the seeds of its own destruction. Those who thus mourn, or perhaps rejoice, over the assumed inevitable demise of competition make up a goodly company. President Van Hise in his book *Concentration and Control*¹ has much to say concerning the "breakdown" as well as the shortcomings of competition. Ex-President Roosevelt and the Progressive party generally were commonly assumed to accept industrial combination as inevitable if not socially desirable. Professor Jenks in his published writings and in his reported utterances seems also to consider that the "wastes of competition" and the "advantages of combination" unavoidably imply a supplanting of competition by combination. "Regulated monopoly" or something closely akin to it, according to this group, is the necessary solution of the trust question.

As against "regulated monopoly" we have those who deny the "inevitableness" of the breakdown of competition, and who, having faith in the beneficence and effectiveness of competition as a regulator of business, insist that the solution of the monopoly problem lies in the direction of rehabilitating and safeguarding competition. This view seems to have triumphed, at least temporarily, in the election of Woodrow Wilson and in the success of the Democratic party. There is not implied in it the assumption, made by some,² that pure-food laws and the prevention of misrepresentation and chicanery, as well as of the so-called "unfair" practices generally, involve any real limitation of competition, any more than a prohibition against direct stealing by one competitor from another is such a limitation. Indeed, those who look to competition rather than to "regulated monopoly" as the solution of the trust problem insist that the preservation of competition itself is inevitably dependent upon the suppression of what are termed the "bullying and browbeating" tactics that are believed to be chiefly

¹ The Macmillan Company, 1912. See *AMERICAN ECONOMIC REVIEW*, vol. III, p. 131.

² By President Van Hise, for example.

responsible for the destruction of competition in the past. In short, instead of "regulated monopoly" their slogan is "regulated competition."

Without attempting at this place to consider further the practical question of public policy in connection with the trusts, attention is called to the fact that the acceptance of the "inevitableness" of the self-destruction of competition involves a thoroughgoing modification of the currently accepted theory of competitive and monopoly prices. Indeed, the real purpose of this short article is to discuss critically an attempt made to supplant the currently accepted price theory by one modified to suit the exigencies of "regulated monopoly"; or, more specifically, by one that attempts to supply a theoretical basis for the "rule of reason" as applied by the Supreme Court to the interpretation of the Sherman anti-trust law.

The attempt here referred to is that made by Professor Frederick C. Hicks, of the University of Cincinnati, in a short pamphlet entitled *Competitive and Monopoly Price*.³ It is discussed at length because the theoretical propositions that Professor Hicks advances, or others similar to his, seem to be implied, even though they are not specifically formulated or expressly accepted, in the writings and utterances of those who advocate regulated monopoly.⁴ Professor Hicks writes so lucidly and succinctly that it is difficult to compress his argument more than he himself has done; but before the points he raises can be critically discussed it is necessary to set forth as faithfully as possible what those points are, how they are related to each other, and what their implication is.

The present trust policy of the United States, says Professor Hicks, is "an attempt to destroy monopoly and thereby leave the field to competitive industry." The explanation of this policy is to be found, he believes, "in an intuitive belief in the doctrine of fair price": this idea is practically universal and has existed for centuries even though, through changing economic conditions, the standard for determining fair price has itself changed. Today, he says, although no standard for determining fairness has been definitely formulated it is believed that fairness depends upon and follows as a matter of course from free competition, and practical

³ Frederick C. Hicks, *Competitive and Monopoly Price* (University of Cincinnati Studies, series II, vol. VII, no. 2. 1911. Pp. 39).

⁴ See, for example, Van Hise *op. cit.*, p. 85.

policy therefore sets up as its goal the suppression of monopoly and the maintenance of free competition.

Turning then to the current theory of price, Professor Hicks states that two sorts of price are recognized, namely, competitive and monopoly, and that corresponding to these are two classes of business, namely, competitive industries and monopolies. His further exposition of the generally accepted price theory may then be summarized as follows: Competitive price is the result of free competition and equals the cost of production. Besides actual outlays cost of production includes "normal profits," which may be considered to be of such an amount as to afford no "extra inducement to enter the business or leave it." If profits are abnormal there is a shifting of the factors under stress of competition until profits are restored to normal level. Monopoly price, on the other hand, is determined by largest net returns as influenced by elasticity of demand and by the various possibilities as to cost. The term monopoly lacks precise definition but it is generally understood to mean that "substantial unity of action" which gives the seller or sellers control of price. The significant thing, according to Professor Hicks, is that "*the fields of competition and monopoly are considered to be distinct.*"⁵

Professor Hicks then raises the question whether the theory as above outlined is "correct and satisfactory." He observes that the method employed to establish the truth of the theory is to show that under competitive conditions, price cannot remain permanently above or below cost of production; and that under conditions of monopoly, price cannot remain permanently above or below the point of maximum net profits. He then considers the current explanation as to *why* competitive and monopoly price cannot vary permanently from the levels thus respectively fixed for them. Taking up first the explanation of the influences that prevent prices from rising above these levels, he finds that in the case of competitive prices "competition" affords a sufficient answer. In the case of monopoly price, however, the current explanation is inadequate. What, he asks, is responsible for the falling off in sales that prevents monopoly price from advancing beyond the level of maximum net return? Current theory simply assumes the fact of falling off in sales without offering an adequate explanation as to why sales fall off. This explanation is, according to our author, that when prices advance too high purchasers turn to

⁵ Italics in original text.

other things, and the sellers of these other commodities, who are trying to attract customers, are, therefore, in essence rivals or *competitors* of the monopoly. For, adds Professor Hicks, "there is no difference *in kind* between the rivalry of those selling the same sort of goods and the rivalry of those selling different sorts of goods, so long as the rivalry results from the fact that each is trying to offer such attractive inducements as to lead people to buy his wares rather than the wares of the same or of different sorts offered by others" (p. 23). In other words, he maintains that in both competitive and monopoly prices it is *competition* which keeps price from going higher.

He turns next to the current explanation of the influences that tend to prevent competitive and monopoly prices from falling below their respective normals. Here, in the case of monopoly price, the power of the monopolist to adjust supply to demand is considered sufficient as an explanation. But it is now in the case of competitive price that Professor Hicks finds current theory wanting. The explanation usually given, he says, is that if competitive price drops below the normal some sellers will go out of business, production will be curtailed "and prices will go up." This is defective because price cannot of itself *go up*; it is *put up*. "So long as two competitors remain in the field *and continue to compete*, "price will continue to fall" (p. 26).⁶ Consequently, when price does not as a matter of fact continue to fall the inevitable conclusion is that competition as an effective force has ceased. But this again is no explanation of the "restoration of price" to the original normal. "If competition drives price below cost of production, price will move up, as has been said, only when it is put up, and *it will be put up only when there is such 'substantial unity of action' among those remaining in the business as to give a control over supply* sufficient at least to enable them to bring the price back again to its normal point" (p. 26).⁷ Professor Hicks is careful to point out the distinction between the fact of "substantial unity of action" and the method employed to bring it about. It may come about as a result of bankruptcy of the weaker competitors, of purchase, or of agreement; or it may come about "merely as the result of an independent recognition by each that he is a loser from unreasonable competition and will be a gainer by spontaneously acting in union with others" (p. 27).

⁶ Italics in original text.

⁷ Italics in original text.

In other words, according to Professor Hicks, just as it is competition which limits monopoly price so also is it monopoly or "substantial unity of action" that limits competitive price. It follows from this that competition and monopoly, instead of being distinct and opposing forces, are in reality simply mutually limiting forces that are jointly responsible for both competitive and monopoly prices.

Professor Hicks dismisses as "casuistical jugglery, worthy alone of the modern prestidigitator," the explanation that it is buyers' competition that brings competitive price back to normal after it has dropped below. If that were the explanation, he avers, it would be logical to argue that it is buyers' competition that raises prices when the monopolist reduces supply, and the conclusion would then follow that all prices, monopoly as well as competitive, are determined by competition. In so far as competition and unity of action are opposing influences in the determination of price, our author argues that they must be regarded either from the standpoint of buyers or from that of sellers, and that the particular standpoint adopted must, to meet the demands of logical consistency, be adhered to throughout the analysis. He himself, he says, adopts the standpoint of the sellers because that seems to be the more common way.

Finally, Professor Hicks takes up the question of the practical bearings of his criticisms and of his constructive suggestions. These are briefly as follows:

(1) Contracts and agreements which limit competition do not necessarily restrain trade in the long run. Unless competition were limited at the point "where its further action" would "result in loss to producers" (presumably this means at normal price), the ultimate outcome would inevitably be bankruptcy to all but the strongest; and the latter would then monopolistically control the field.

(2) There is no such thing as a natural law of competition. The natural results of competition "if left to itself, are its own destruction and public injury" (p. 34). Granting that normal price is a fair price, the only way that it can be realized is through a "*proper balancing of competition and unity of action, the former insuring fairness to the consumer, the latter insuring fairness to the producer.*"⁸

How is this balance to be secured? Under perfect fluidity of

⁸ Italics in original text.

capital, labor, and business ability, the balancing would be automatic and fairness would be assured; but under actual conditions, it is only that capital, labor, and business ability not yet employed in industry that is really fluid. This limited fluidity prevents price from rising much above normal, but it cannot prevent price from dropping below normal. Under such circumstances the "fairness" insured is only the fairness to consumers and not that to producers, and "no policy looking to fairness can be expected to succeed which does not provide fairness for the producer as well as for the consumer" (p. 36). In other words, "free competition" is not an adequate solution of the trust question, for competition must itself be limited by reasonable unity of action; and the task of the legislator and the administrator, in working out a sound policy, must be so to delimit the fields of operation of both these forces that neither can completely overwhelm the other.

With this outline of Professor Hicks's argument before us a critical examination of its main points may be considered in order.

The first point to be raised is Professor Hicks's criticism that current theory treats competition and monopoly as two distinct and opposing rather than as two coördinate and mutually limiting forces. In this connection it will be recalled that in the case of monopoly price Professor Hicks emphasizes the alleged fact that price is kept from going above the normal by the rivalry of the sellers of those goods to which a part of the income is diverted that would, at the normal price, have been expended for the monopolized goods. He asserts, in other words, that competition prevents monopoly price from going above the normal. Here two objections may be raised. The first is that the assimilation of what Professor Seligman calls "personal competition" and that which he calls "commodity competition" is confusing rather than helpful in so far as the monopoly problem is concerned. Commodity competition is just as potent in the field of competitive prices as it is in that of monopoly. It is not commodity competition that courts and legislators are trying to preserve. That nothing can seriously menace. It is "personal competition" that is the important competition from the point of view of the public; and in the great majority of cases that is the only kind of competition that is thought of when the word competition is mentioned. Nobody, for example, thinks of the various departments of the Wanamaker store as, in a business sense, in competi-

tion with each other. It may, therefore, be respectfully denied that as "business phenomena, there is no difference in kind"⁹ between commodity competition and personal competition.

The second objection is that what is alleged to be a fact is not necessarily a fact. The income that is withheld from the purchase of monopolized goods when the prices of these goods are above normal is not necessarily diverted to other goods at all. It is conceivable that the entire amount is simply saved. It may even be hoarded in the shape of money. Under such circumstances how could it be said that it was "competition" that put an upper limit on monopoly price?

It will also be recalled that in the case of competitive price Professor Hicks maintains that it is virtually monopoly, or "substantial unity of action," that prevents such prices from dropping below the normal level whenever they are prevented from so dropping, and that he dismisses somewhat scornfully the explanation that "buyers' competition" is the upholding force. Here again confusion must surely result from assimilating the action of competing sellers in stopping price cutting at the point of loss and that of the monopolist who is adjusting supply in order to obtain "normal" monopoly price. After all, competition is at bottom a state of mind, and it is submitted that the state of mind that lies behind whatever "unity of action" is implied in the maintenance of normal competitive price is vitally different from that which lies behind the "unity of action" responsible for the maintenance of normal monopoly price.

And in this connection it must also be asked, why does "logical consistency" require that, in so far as competition and monopoly are opposing forces, they must be viewed *either* from the standpoint of buyers *or* from that of sellers? "Logical consistency" in theory demands only truth, and hence the question is simply whether there is or is not competition among buyers as well as among sellers. Is there not competition among buyers at an auction sale?¹⁰ Or, to take the situation in the speculative markets where competition is usually said to be least impeded, is there not competition among buyers there? In any market do not changes in the number and level of offers to buy have relatively the same effect on price as similar changes in the offers to sell? It is true

⁹ Italics in original text.

¹⁰ Whatever be the situation on the supply side it does not, of course, alter one way or another the fact of competition on the demand side.

that as industry is now organized sellers in their search for money profits for the most part name prices to begin with and seek eagerly after purchasers, but unless there be competition among buyers there is no more reason why all sellers should be able to get a uniform "marginal supply price" than that, under the competition of sellers, all the buyers are compelled to pay only "marginal demand price."

This brings up Professor Hicks' next point that the "inevitable result" of competition is self-destruction, unless that competition is "restrained" at normal price. Can that be asserted as a general proposition? Does it hold good even as a limited proposition applying, however, to a majority of cases in industry? Does the mournful contemplation of President Van Hise and others of the ruins of competition in the past necessarily prove that the havoc must be attributed to something inherent in competition itself? Has it not been frequently shown in the past that competition is ultimately self-limiting only where increasing returns are operating, or where perhaps the nature of the industry is such as to require relatively huge outlays for specialized fixed capital or, finally, where, to start out with, competitors are very unevenly matched in strength? Competition does involve a progressive elimination of the unfit, but that is due to the fact that, after all, "normal price" is not static but dynamic, and competition is the most powerful of the beneficent forces that tend to make it so. Where increasing returns are wanting, where no expensive specialized forms of capital are essential, where competitors are not greatly unequal in strength, where none enjoys special privileges of any kind, and where, through legal enactment or public opinion, what Professor Seligman calls the "level of competition" can be maintained, there is no danger that the end of competition is self-destruction. In most cases in industry the law of diminishing returns would prevent such a *dénouement*. Too often in the past the so-called self-destruction of competition has been plain murder by those who sought monopoly power.

Finally, let us consider Professor Hicks's contention that the limited fluidity of the industrial agents insures "fairness" only to the consumer and not to the producer. Is this so? Does the withdrawal of capital, of labor, and of business ability from a given field have no effect on the entrepreneurs, capitalists, and laborers remaining in the field? Did not the option of "free land" in the West, exercised by a limited number of laborers, serve to

uphold the wage rate in the United States? Did not the exercise of this option also cause a great demand for capital that tended to maintain a high interest rate throughout the field of industry in this country? And did not the withdrawal of business ability from the sewing machine and other lines of industry into the automobile industry leave the competitive situation somewhat more comfortable for those who could not withdraw from the old lines? Surely an affirmative answer must be given to all these questions; and if the answer be in the affirmative, then the conclusion follows that in the majority of cases all that is necessary to insure "fairness" to the producer as well as to the consumer is to guarantee real freedom of competition.

Furthermore, it must also be noted at this point that the trust question is not only a question of the interest of the producer as against the interest of the consumer. It is, as well, a question of the interest of the entrepreneur as against the respective interests of capitalists, landowners, and laborers. And recognizing this simply strengthens the contention that "fairness" all around, except in the cases already allowed for, is most safely insured, within the rules imposed upon all by society, by the fullest freedom of competition.

In conclusion it must therefore be said that Professor Hicks has not given us a convincing theoretical basis for the "rule of reason," whatever may be thought of applying the "rule of reason" in the enforcement of the Sherman law. Indeed, the opinion may be ventured that any theory assuming self-destruction of competition as a general proposition is foredoomed to failure. Yet no student can read Professor Hicks's excellently written pamphlet without being grateful to him for his lucid criticism and his stimulating suggestions even though, as in the case of the undersigned, both the criticism and the suggestions provoke vigorous opposition.

EUGENE E. AGGER.

Columbia University.

FARM CREDIT IN A NORTHWESTERN STATE

In view of the ever-increasing demand for improved rural credit facilities, an analysis of conditions in a single state should be of interest. In a recent series of newspaper articles, the writer urged the farmers of North Dakota to organize some form of coöperative credit as a means of lowering the interest rate on borrowed capital.¹ Bankers immediately raised protests, declaring that rates were not too high; that seemingly high rates in certain localities were due to local conditions; and finally that these local conditions could not be eliminated by the inauguration of any new credit system. The controversy had not proceeded far when it became apparent that no agreement could be reached on the fundamental question of reform until two questions were answered: (1) What is the prevailing rate of interest? (2) To what extent is the rate affected by local conditions?

An investigation covering the above questions followed, the results of which are here set forth. The reader is asked to keep in mind the fact that North Dakota is a very young, agricultural state, which is still in the process of being settled. About 90 per cent of its population is rural; the density of population is only 8.2 per square mile as compared with 30.9 for the whole country. Only 45 per cent of its land area is improved.

Again, one must keep clearly in mind two types of loans, the long-time loan and the short-time loan. The former is for permanent investment purposes, such as buying new land, improving old land, erecting buildings, or purchasing expensive machinery. The short-time loan is used for purchasing inexpensive machinery, provisions, etc., and is used to tide the borrower over until the next harvest. The former loan averages about \$1500 to \$2500, and runs for about five years; the latter varies from \$100 to \$500, and runs anywhere from three months to one year. The long-time loan is secured by a farm mortgage; the short-time loan may be secured by chattel mortgage or it may be unsecured, and is always made on the farmer's personal note.

By means of questionnaires sent to bankers, implement dealers, and farmers, information was secured concerning both types of loans. Fortunately the data secured are sufficiently extensive to admit of reasonably safe conclusions for the entire state.

¹ These articles appeared in the *Grand Forks Herald*, Feb. 23, 25, 26, 1913; and in the *Fargo Forum*, Feb. 24, 26, 27, 1913.

Long-time loans. Questionnaires were mailed to 200 representative banks, of which 125 reported, giving returns for 45 out of the 50 counties in the state. As there are 660 banks in the state, returns were obtained from about one fifth of all the banking institutions. These replies show that the average farm mortgage runs for 4.94 years; and that the average interest rate is approximately 8 per cent (accurately 7.88 per cent). This 8 per cent does not include the expense of abstracting titles, examining the property, and the recording of the mortgage. These fees are invariably paid by the borrower. Nor does this interest rate of 8 per cent take account of the bonus that is frequently exacted, in the newer regions, from the borrower for the privilege of securing a loan; nor does it allow for the sum the borrower loses in paying his yearly interest in advance, which is deducted from the principal. In one county, for instance, a farmer had to pay a bonus of \$50 for borrowing \$1000 at 10 per cent interest. The farmer secured \$850, since \$100 was deducted as interest on the \$1000 and \$50 was deducted as a bonus. In this case the actual interest was considerably higher than the nominal interest rate of 10 per cent. While the practice of exacting a bonus is not common, it is generally the custom to deduct the entire year's interest in advance; assuming an 8 per cent rate, the farmer therefore pays \$80 interest not on \$1000 but on \$920, which brings the rate up to 8.7 per cent.

While the average prevailing rate, according to our returns, is approximately 8 per cent, the rate varies in different parts of the state, depending upon the local conditions. In the following table is shown the rate of interest by groups of banks and groups of counties:

Table 1.—*Rate of interest on farm mortgages in North Dakota*

Number of banks	Number of counties	Rate of interest
15	4	6 to 7
45	16	7 to 8
36	12	8 to 9
13	5	9 to 10
16	8	10 to 11
125	45	7.88

The fifteen banks reporting less than 7 per cent rate are all located in the Red River Valley counties, *viz.*, Cass, Grand Forks, Traill, and Walsh. These are the most fertile and longest cultivated counties in the state. On the other hand, the banks report-

ing a rate of 9 per cent or more are located, as a general rule, in the newer and more undeveloped counties in the western part of the state. The counties in the central part of the state average from 7 to 9 per cent. The rates are lowest in the eastern tier of counties, and rise gradually towards the western part of the state, where the rate runs up to 10 and 12 per cent, which is also the rate in the eastern part of Montana.

That the 8 per cent rate is quite general for a large part of the state is evidenced from the fact that 25 of the 45 counties report an average rate of 8 per cent or more. In only 4 counties is the rate less than 7 per cent. One half of all the 125 reporting banks charge 8 per cent or more; and 110 charge 7 per cent or more. The following table shows the extent to which the several rates prevail in North Dakota:

Table 2.—*Interest rates on farm mortgages in North Dakota*

Rate of Interest	Population	Per cent of state	Number of farms	Per cent of state	Farm acreage	Per cent of state
Less than 7	113,518	19.7	9,376	12.6	3,879,222	13.6
7 to 8 . . .	189,573	32.9	21,617	29.1	9,043,582	31.8
8 and over	273,965	47.5	43,367	58.3	15,502,846	54.5

It is clear from this table that at least one half of the state is subject to the 8 per cent rate, only a small part enjoys a rate below 7, and in no county does the average fall below 6 per cent.

The above figures are conservative. They are based on returns submitted by bankers who would naturally understate rather than overstate the rate of interest charged in their respective localities. Furthermore, we have a check on these bank returns in the replies received from farmers. Questionnaires were sent to over 100 representative farmers residing in different parts of the state; 29 farmers, living in 22 different counties, reported an average of 7.91 per cent on first farm mortgages, which rate is only slightly higher than the rate returned by the bankers in 45 counties. As a rule the rates reported by bankers and farmers are nearly identical in their respective counties. It is safe to conclude, therefore, that the average rate on farm mortgages for the entire state is about 8 per cent.

Short-time loans. Short-time loans are of two kinds, bank loans and book credit advanced by retail stores. The bank loan is made on the farmer's note, generally unsecured, though often

secured by a chattel mortgage. According to the reports received from 125 banks, the average length of time for these short-time loans is 8½ months; and the average rate of interest is 10.75 per cent.

Table 3.—*Interest rates on short-time loans in North Dakota*

Number of banks	Number of counties	Rate of interest
2	1	7 to 8
9	3	8 to 9
13	4	9 to 10
38	13	10 to 11
27	11	11 to 12
36	13	12
125	45	10.25

The average rate on short-time loans, based on these bank reports, is 10.75 per cent. In the questionnaires mailed to the farmers, information was also asked for rates of interest paid by them on short-time loans, running from one month to one year. The average rate reported by these farmers, residing in 22 different counties, was 11.07 per cent.

An effort was made to compare rates paid by farmers with those paid by business men on short-time loans in the same locality. The same banks that reported an average of 10.75 per cent to farmers averaged only 9.18 per cent on loans made to merchants and manufacturers. Fully 95 out of the 125 reporting banks stated that the rate was higher for agricultural short-time loans than for commercial loans; 26 reported the rate to be the same for both classes; and only 4 reported a lower rate for the farmer. As North Dakota, however, is not a manufacturing nor a jobbing state, commercial paper is scarce, and consequently comparisons of the above nature are apt to be misleading. The significant fact remains that the farmer pays from 10 to 11 per cent on small loans, for short periods of time.

Store or book credit is a form of short-time loan which is perhaps more important than bank credit. In a state where the bank charges a high rate of interest, the farmer is more likely to buy merchandise on credit than to borrow from the bank and pay cash. The North Dakota farmer is rarely denied credit at a country store. To secure information on this form of credit, questionnaires were mailed to implement and hardware dealers, as well as to farmers. One question asked of implement dealers was: "What percentage of farmers pay cash in buying farm

machinery?" The answer from 54 firms, located in 35 counties, was that only 13 per cent of the farmers pay cash, 87 per cent buying on time. Out of 29 farmers reporting only 6 pay cash in buying machinery and supplies. These book accounts run anywhere from three months to two years: the average account is carried about one year (12.37 months). The farmer contemplates making payment immediately after his prospective crop is marketed. In case of crop failure the retailer will carry the account over until the next harvest season. A crop failure in a country where the farmer depends on a single crop, as he does in North Dakota, forces the retailer to carry the book account one whole year beyond the first harvest.

It is quite common for the dealer to obtain a note from the farmer,—the note generally bearing a 10 per cent interest rate from the date of issue. Often, however, the note does not begin to bear interest until the farmer has failed to make payment at the expected time, that is, immediately following the harvesting season. The 54 implement and hardware dealers reported an average of 10.26 per cent interest per year on these notes.

It was more difficult to secure uniform information from dealers on the subject of book credits, especially with reference to the interest rates charged on such accounts. The practice varies. Usually an interest rate is added to the credit price depending on the duration of the account. There is no common discount rate for cash purchases, though 7 per cent is most common, that is, 7 per cent of the credit price. This brings the credit price of a \$160 binder down to \$150 for cash. As a matter of fact all dealers quote two prices, the cash and the credit price, the difference between the two depending upon the reputation of the buyer, the shrewdness of the seller, and the degree of competition in the particular locality. Some dealers report a credit price of \$155 for a \$150 binder, whereas one dealer charges \$180 for a \$160 binder.

On this point, replies from farmers do not differ materially from the replies of the implement dealers. The difference between the cash price and the credit price of a binder is usually given as \$5 to \$10, and of a wagon or plow, as \$3 to \$5. The general discount rate is 7 per cent off the credit price. If the farmer borrowed \$150 from the bank for four months at the current interest rate (10 per cent) and paid cash for the binder, the net cost would be \$155, the interest charge being \$5. But since some

dealers charge as high as \$160, the interest rate on book credit is manifestly 20 per cent. In spite of this expensive book credit, farmers persist in buying on credit.

The implement dealers and the farmers are all agreed that cash payments would be preferable if rates on bank loans were reduced. The farmer, however, is often afraid to approach the banker for a loan. On the other hand, the farmer does not always see that the book credit is quite as expensive as bank credit, if not more so. The prevailing high bank rate, however, from 10 per cent to 12 per cent on short-time loans, does not encourage cash payments.

Are the foregoing rates too high as compared with rates in other communities? The "Crop Reporter" for April, 1913, shows interest rates on short-time loans in every state in the union.² In 1913, the North Dakota rate exceeds that of all other states; in 1912, it exceeded all but Oklahoma.

Farmers as a rule think that rates are fixed arbitrarily by the bankers and other money lenders in the community. That fundamental laws of supply and demand have any controlling influence is apt to be overlooked. Without attempting to justify the high rates let us state some of the conditions which help to explain them. The demand for capital in a growing state is always greater than can be met by the local supply. In 1890, North Dakota farms were mortgaged for \$11,168,854; in 1910, for \$47,841,587; in 1920 it will doubtless reach \$150,000,000. Outside capital is attracted into the state by high rates of interest. Two life insurance companies, the Union Central of Cincinnati and the Northwestern Mutual of Milwaukee, loan heavily in the state. In 1910 the Union Central Life Insurance Company reported a total investment of \$5,489,087.33 in North Dakota real estate. Local banks use farm mortgages in borrowing money from banks in large cities outside of the state. Every town and village has its money-lender who acts as agent for foreign investors in farm mortgages. Banks within the state compete for capital by offering high rates of interest on time deposits, and pay all the way from 4½ to 7 per cent interest on deposits. The rate on loans must necessarily be higher under these circumstances than where banks are paying 2½ and 3 per cent interest. The high interest rate paid on bank deposits is evidence of the lack of local capital to satisfy the local demand.

² *Crop Reporter* of the U. S. Department of Agriculture, vol. XV, no. 4, April 12, 1913. p. 27.

The inability to attract foreign capital on lower terms is due primarily to the character of the investment. The newness of the state, the instability of its population, the character of its agriculture, all make for uncertainty. Hence the speculative character of the farm mortgage as security for a loan. In the eastern counties where the land has long been under cultivation, where the population is more stable, and where mixed farming has in a large measure supplanted the bonanza wheat farm, rates are correspondingly lower than in the newer portions of the state. As the element of risk is eliminated from investments, interest rates will come down. At least this seems to be the consensus of opinion among bankers.

The character of the farming is frequently mentioned as a prominent factor in the credit situation. A crop failure under a single crop system, such as is practiced in North Dakota, is likely to find the farmer in bad straits. The payment of interest on the mortgage is delayed or deferred. The local bank or loan company is obliged either to carry the farmer along for a year or to foreclose. Since many farm mortgages are held by outside investors, the annoyance is sufficient to reflect itself in an increased rate of interest. Because of this fact many bankers are urging mixed farming as a means of reducing rates. This aspect of the question is well expressed in a communication from a banker in Stark County who says:

It is our belief that the scarcity of money and the high interest rates are largely due to poor farming. The people having money to loan know well that our farmers here have a very uncertain income according to their present methods of farming, and would expect a much higher rate commensurate with the risk taken than when they can find people where money can be placed more safely. As conditions are here now, some people have not paid all of their interest for at least three or sometimes four years. In the older states, like Iowa for an example, where people farm well, interest rates are much lower. As soon as our farmers can show that they are safe and will take care of their obligations promptly, they can command the lowest interest rates that may exist. We believe it more necessary to work on better farming methods, encouraging them, than on better interest rates, for the lower interest rates are a natural consequence to better farming.

Another factor is the character of the population. One prominent banker says of North Dakota farmers: "They lack a sense of responsibility. Farm loans require constant care, hence high rates." Another complaint is: "Farmers are careless in not

making prompt payment or renewals of obligations." Some bankers think the high rates due to too much borrowing; that is, too much liberality in the loaning of money. Injudicious loaning leads to extravagance, and naturally calls for high rates to offset the risks involved. One banker in analyzing the situation claims that the legal restrictions placed on the loaning power of banks is responsible for undue high rates. In support of this view it might be stated that while the total farm mortgages in the state in 1910 reached the \$50,000,000 mark, the power to loan on real estate by all banks, state and national, was less than \$5,000,000. Banks are forced to loan on the personal note of the farmer, secured by a mortgage, instead of taking a direct mortgage on the property. Other banks turn these mortgage loans over to trust companies, and collect a commission from the farmer for placing the mortgage. At least one banker advocates the granting of more power to banks to loan on real estate directly, thus eliminating commissions and also removing the incentive to charge higher rates because of the indirect method of loaning on farm mortgages, as security for personal loans.

Commissions are responsible for at least from one to two per cent of the rate when loans are handled by real estate agents and loan companies. In the case of loans by life insurance companies, the state agent generally receives one per cent and the local agent, at interior points, receives one per cent. Two per cent could be saved by the farmer if the money could be borrowed directly from the investor, without the aid of an agent.

Allowing, however, for all these local conditions—the great demand for capital in a new and developing country, the inability to attract sufficient outside capital because of the risky character of investments, the irresponsible character of some elements in the population, the character of farming methods, the commission agent, and the legal restrictions handicapping banks—allowing for all these conditions, and because of some of them, it is believed that the farmers by organizing coöperative credit associations could reduce the rate of interest on both long and short-time loans; and, furthermore, that such coöperative credit facilities would be a means of improving the methods of farming, would encourage stability in population, and would make the farmer feel that he is not being discriminated against in the borrowing and employment of capital.

University of North Dakota.

MEYER JACOBSTEIN.

THE DEFINITION OF ECONOMICS

In hope of attracting the attention of economists to the definition of economics proposed in my book, *Enterprise and the Production Process*, I desire to point out a remarkable coincidence between the logical distinctions and processes by which this definition was obtained, and those employed by Mr. Herbert Spencer in distinguishing actions primarily social from other human activities.

To obtain my definition, I started with the assumption that economics is the moral science concerned with the laws and tendencies regulating a certain class of voluntary human actions, and that its definition depends upon accurately differentiating this class from other human activities. The first division of human activities is, of course, that between the individualistic and the coördinated or combined. Economic activities being a subclass of the latter, the problem is thus narrowed down to distinguishing economic from other coördinated or combined actions. I then found this distinction to be the character of the purpose leading to the different kinds of voluntary human actions. Social actions are prompted by a public purpose, that is, undertaken for the real or supposed good of the social group as a whole, and the share of the joint benefits of the results attained that accrues to any individual member of the group, is necessarily unpre-determined. On the other hand, economic activities are prompted by individualistic purposes, and therefore the necessary preliminary to combined economic action is a definite understanding as to what share of the product or result is to accrue to each individual voluntarily entering into the productive combination. When the product is divisible, this definite prearrangement as to the distribution of the product can be effected by allotting a certain percentage to each contributor. When not susceptible of division into percentages, it is the distribution of the value of the product, and not the product itself, which is prearranged and as a rule is effected by the employer's assuming the risk of the enterprise, and awarding definite prearranged amounts of values to the other contributors to the result, and keeping what is left for himself.

The passage in Mr. Spencer's writings to which I refer is as follows:¹

¹ Herbert Spencer, *Sociology*, vol. II, p. 244-247 (1898 edition), D. Appleton and Company. The italics are mine.

Coöperation, then, is at once that which cannot exist without a society, and that for which a society exists. But co-operation implies organization. If acts are to be effectually combined, there must be arrangements under which they are adjusted in their times, amounts, and characters. This social organization, necessary as a means to concerted action, is of two kinds. Though these two kinds generally co-exist, and are more or less interfused, *yet they are distinct in their origins and natures.* There is a spontaneous co-operation which grows up without thought during the pursuit of *private ends*; and there is a coöperation which, consciously devised, implies *distinct recognition of public ends.* The ways in which the two are respectively established and carried on, present marked contrasts. Whenever, in a primitive group, there begins that coöperation which is *effected by exchange of services*—whenever individuals find their wants better satisfied by giving certain products which they can make best, in return for other products they are less skilled in making, or not so well circumstanced for making, there is initiated a kind of organization which then, and throughout its higher stages, results from endeavors to meet personal needs. Division of labour, to the last as at first, grows by experience of mutual facilitations in living. Each new specialization of industry arises from the *effort of one who commences it to get profit*; and establishes itself by conducting in some way to the profit of others. So that there is a kind of concerted action, with an elaborate social organization developed by it, which does not originate in deliberate concert. *Though within the small subdivisions of this organization, we find everywhere repeated the relation of employer and employed,* of whom the one directs the actions of the other; yet this relation, spontaneously formed in aid of private ends and continued only at will, is not formed with conscious reference to achievement of public ends: these are not thought of. And though, for regulating trading activities, there arise agencies serving to adjust the supplies of commodities to the demands; yet such agencies do this not by direct stimulations or restraints; but by communicating information which serves to stimulate or restrain; and, further, these agencies grow up not for the avowed purpose of thus regulating, but in the pursuit of gain by individuals. So unintentionally has there arisen the elaborate division of labour *by which production and distribution are now carried on*, that only in modern days has there come a recognition of the fact that it has all along been arising.

On the other hand, coöperation for a purpose immediately concerning the whole society, is a conscious coöperation; and is carried on by an organization of another kind, formed in a different way. When the primitive group has to defend itself against other groups, its members act together under further stimuli than those constituted by *purely personal desires.* So that this kind of social organization is distinguished from the other, as arising *through conscious pursuit of public ends*; in furtherance of which individual wills are constrained first by the joint wills of the entire group, and afterwards more definitely by the will of a regulative agency which the group evolves.

Most clearly we perceive the contrast between these two kinds of organization on observing that, while they are both instrumental to social welfare, *they are instrumental in converse ways*. That organization shown us by *the division of labour for industrial purposes*, exhibits combined action; but it is a combined action which directly *seeks and subserves the welfares of individuals, and indirectly subserves the welfare of society as a whole by preserving individuals*. Conversely, that organization evolved for governmental and defensive purposes, exhibits combined action; but it is a combined action which *directly seeks and subserves the welfare of the society as a whole, and indirectly subserves the welfare of individuals by protecting the society*. Efforts for self-preservation by the units originate the one form of organization; while efforts for self-preservation by the aggregate originate the other form of organization. In the first case there is *conscious pursuit of private ends only*; and the correlative organization resulting from this pursuit of private ends, growing up unconsciously, is without coercive power. In the second case, there is *conscious pursuit of public ends*; and the correlative organization, consciously established, exercises coercion.

Of these two kinds of coöperation and the structures effecting them, we are here concerned with only one. Political organization is to be understood as that part of social organization which consciously carries on directive and restraining functions for public ends. It is true, as already hinted, and we shall see presently, that the two kinds are mingled in various ways—that each ramifies through the other more or less according to their respective degrees of predominance. *But they are essentially different in origin and nature*; and for the present we must, as far as may be, limit our attention to the last. . . .

Mr. Spencer's immediate purpose in these paragraphs is to differentiate coördinations with a public purpose, from other coördinations. By "public" he intends the state, or the community at large, and he claims such coördination to be primarily social. But he must surely be understood as also considering as primarily social such combined actions as have for their purpose the benefit of lesser groups, such as clubs, trade unions, etc., that hardly come under the term "public." The thing to be noted is that he refuses to recognize as primarily social any combined activities, the resulting benefit of which is not expected to accrue as an undivided whole to the group, and the final distribution of which will finally be, among the members composing the group, in unpredetermined portions.

Mr. Spencer, indeed, speaks of the excluded coördinations as social, but he is careful to point out that primarily they are not social, that the resulting benefits first accrue as private gains to individuals and that society is affected only secondarily, or, in other words, that human actions combined for private purposes,

while having social results, are not themselves social. That is to say, such actions furnish sociological data. Again, while Mr. Spencer nowhere calls the combinations for "private gain" economic, he invariably speaks of them in economic terms. Neither does he distinctly assert that when "private gain" is the end in view, the distribution of the product or of its value is always prearranged. But that he meant this is clearly evident from the fact that when the hope of "private gain," leading to coördination or combination, is indefinite and unpredetermined, the resulting action is social and not economic, as when a free-trader in hope of "private gain" votes for a protective tariff.

Surely I am not claiming too much in asserting that Mr. Spencer divided human actions into three classes coinciding exactly with my analysis of them—one class of individualistic actions and two classes of coöperative actions, one of which was primarily social and the other primarily economic. His classification and mine are in exact accord as far as they go. He did not, indeed, assert that individualistic actions are non-economic. Consequently, I cannot claim that Mr. Spencer agrees with me in this particular point, but it is only because he has not expressed himself. And as a purely individualistic activity cannot result in an exchangeable product, it is not likely he would have differed from me.

That Mr. Spencer's ideas and my own are practically identical does not, of course, prove that my definition of economics is the correct one, but it does, I think, entitle it to a careful consideration, especially as its acceptance would involve no little modification in the presentation of economic theory. Hardly an economic treatise now exists in which instances of individualistic or social activities being treated as primarily economic cannot be found.

FREDERICK BARNARD HAWLEY.

THE IMPATIENCE THEORY OF INTEREST

In the December number of the *REVIEW*, Professor Seager criticises my "Impatience Theory of Interest" for its failure, as he thinks,¹ to take account of the element of productivity or the "technique" of production.

Professor Seager's criticism came to me as a great surprise and seems very *mal à propos*; for what Professor Seager calls the "productivity" or "technique" element, so far from being lacking in my theory, is one of its cardinal features and the one the treatment of which I flattered myself was most original! The fact is that my chief reason in writing the *Rate of Interest* at all arose from the belief that Böhm-Bawerk and others had failed to discover the true way in which the "technique of production" enters into the determination of the rate of interest. Believing the "technical" link in previous explanations unsound, and realizing as keenly as Professor Seager does the absolute necessity of such a link, I set myself the task of finding it. In the desirability of this I emphatically agree with Böhm-Bawerk.²

The other features of my interest theory—those which Professor Seager has examined and found correct—are the parts for which I was chiefly indebted to Böhm-Bawerk and John Rae. These were restated according to my own concepts, definitions, and modes of thought, but were, nevertheless, their theory more truly than mine.

Professor Seager has depended too much on my short and inadequate statement of the theory in the *Elementary Principles of Economics*.³ Nowhere in his article does he refer specifically to any passage in the *Rate of Interest* relating to my treatment of the productivity theory.

¹ "The Impatience Theory of Interest," *AMERICAN ECONOMIC REVIEW*, December, 1912, p. 849; see also p. 834 (last paragraph); p. 836 (last of middle paragraph); p. 837, l. 20.

² "The statement of how the productivity of capital works into and together with the other two grounds of the higher valuation of present goods, I consider one of the most difficult points in the theory of interest, and, at the same time, the one which must decide the fate of that theory." (*The Positive Theory of Capital*, p. 277.)

³ "The re-presentation of Professor Irving Fisher's 'Impatience Theory of Interest,' in his *Elementary Principles of Economics* is significant for several reasons. . . . The formidable array of rigid mathematical proofs with which it was accompanied in his *Rate of Interest* could not but be awe-inspir-

Possibly Professor Seager would have been justified in criticising my elementary textbook *as a textbook* for the fact that I almost (not quite) omitted the "productivity" or "technique" feature. But he seems to have estopped himself from the right to make even this criticism; for at the beginning of his article he apparently agrees that I ought not to introduce controversial matter into a textbook, and there is nothing in the theory of interest so controversial as the element relating to the "productivity" of capital.

Having pleaded "not guilty" to the charge of neglecting the "productivity" or "technique" element, my next task is to prove my innocence. A cursory examination will show that the "productivity feature" is elaborately treated in my *Rate of Interest* in chapters 8, 9, 10, and 13 (to say nothing of the mathematical appendix to chapter 8). I endeavored in the text of the book itself to state and restate this principle in its many different phases which are not always recognized as organically related to each other, and, so far as possible, to put it forth as an amplification or correction of the inadequate statements in Böhm-Bawerk's theory, as well as in the theories of Henry George, John Rae, Adolphe Landry, and others. In concluding chapter 2, in which I criticised the ordinary productivity theories, as well as in concluding chapter 4, which is devoted to a criticism of Böhm-Bawerk's theory, so far as it relates to productivity, I explained to the reader that later in the book I would rebuild the "technical" feature which, in the theories of others, I sought to destroy. This was done in chapters 8 to 10. A few passages from these chapters are quoted in the footnote below.⁴

ing, even when not convincing, to economists less accustomed to the use of mathematical symbols and modes of expression. To the extent that the latest formulation is clothed in a language that all may follow and understand, its merits and demerits stand out the more clearly and unmistakably. While this simplifies the task of the critic, the fact that a thinker of Fisher's acuteness adheres to his explanation shows criticism to be still important." ("The Impatience Theory of Interest," *AMERICAN ECONOMIC REVIEW*, December, 1912, p. 834.)

⁴For example, in chapter 8, devoted particularly to the productivity element, after stating my own conclusions on the subject, I said (*Rate of Interest*, p. 159): "*We have introduced a new magnitude into our discussion; namely, the rate of return on sacrifice, and especially the particular value of this rate of return called the MARGINAL rate of return on sacrifice. This marginal rate of return on sacrifice comes close to being a 'natural rate of interest.' By means of it we are enabled to admit into our theory the*

These quotations are sufficient to prove that productivity has not been neglected in my treatment of the theory of interest. Many more passages might be cited. In fact, out of 208 pages of my book (exclusive of the appendices and the chapters on the relation of interest to money), devoted to explaining and defending my own theory of interest, about 80 pages, or two fifths, are devoted to the feature which Professor Seager would seem to think I have omitted altogether!

Besides these 80 pages of text, about 20 pages of the mathematical appendices are devoted to the so-called productivity feature, ending with the statement:

The geometrical method enables us to form a mental picture, clearer than would otherwise be possible, of the various factors at work, and especially of the manner in which the objective or "technical" conditions . . . co-operate with the subjective conditions which influence the rate of interest. It was, in fact, only through the geometrical representation that the writer was first enabled to grasp the significance of the "effective range of choice" in its general bearings.

I emphasize the last passage in view of what Professor Seager says of mathematics. It was through mathematics that I saw the nature and importance of productivity in relation to interest.

elements of truth contained in some of the claims of the productivity theories, the cost theories, and Böhm-Bawerk's theory of the technique of production."

I then proceeded to show how this element of productivity, as I had incorporated it into my theory of interest, was related to the "productivity" or "technique" element in other theories. (*Rate of Interest*, pp. 159-166.)

I then stated (*Rate of Interest*, pp. 163-166): "Thus the elements of truth which were found in the productivity theory, in the cost-theory and in Böhm-Bawerk's technique-of-production theory, all find a place under the head of the choice among optional uses of capital.

. . . "To a person who has never tried to connect them, many of the theories of the authors just compared seem to have no vital relation. But they are seen to be connected as soon as we look at them in the light of the concept of an income-stream. The problems of choosing when to cut a forest, of what length to make a production period, to what degree of intensiveness to cultivate land, or how far to improve a piece of land, are all problems of choosing the best out of innumerable possible income-streams. In each problem the rival income-streams present differences as to size, shape, composition, or probability,—especially shape."

Again I specifically stated (*Rate of Interest*, p. 186):

"But while the slowness of Nature is a sufficient cause for interest, her productivity is an additional cause."

Other pertinent quotations might be given (*e.g.*, *Rate of Interest*, pp. 186; 187; 192; 193; 194; 196; 240; 241; 242; 251).

There is a principle of mathematics that a problem is determinate only when the number of independent determining conditions are equal to the number of unknown quantities to be determined—a principle greatly emphasized by Marshall, Cournot, Walras, and Pareto. Whatever sins of commission are open to the mathematical economist, the particular sin of omission (such as overlooking one of the necessary conditions determining the rate of interest) is scarcely open to him at all. Counting the number of equations and comparing this with the number of unknown quantities thus affords a valuable check on one's work. Many economists, for lack of such a check, have done precisely what Professor Seager accuses me of doing, *viz.*, omitting the technical feature altogether; but I know of none of mathematical proclivities who have done so.

I shall not take space here to state, much less to justify, my rendering of the "technique" element. My book, as I have said, was written expressly for that purpose, and to it I must refer the reader. On page 150 are stated the six conditions which, according to my findings, determine the rate of interest. The chief one which relates to "productivity" is number four, and this is, on pages 150 to 156, expressed in three distinct forms, the third of which is discussed at length on pages 156-158; and its relation to the productivity feature of other writers is shown on pages 159-167. On page 221, the results of the three successive approximations are stated in tabular form. There the fourth or productivity condition is most briefly stated as follows:

The individual selects from the eligible list (of prospective income-streams varying in distribution, in time and otherwise) the income-stream which has in present estimation, whether truly or falsely, the maximum present value. If the alternatives are numerous and vary continuously from each other, this condition is equivalent to the condition that the marginal rate of estimated return on sacrifice shall equal the rate of interest.

I regret that this reply to Professor Seager has had to take the form of references and citations, but I cannot find, in his article, many direct and important issues to join. The chief exception seems to be the following: Professor Seager apparently believes that a general increase in the physical productivity of capital would raise the rate of interest, while I, on the other hand, believe it would lower it. He objects to my illustration of the orchard since, to him, land is not capital, and so, if I

understand him, has no interest. He points out that other, or, as he would say, true capital is, unlike the orchard, reproducible by labor and says:⁵ "Time being allowed for an adjustment to the new conditions, the values of the produced means to further production will be brought into conformity to the expense of producing them. Since there is nothing in the assumption that the productivity of all instruments is doubled that involves any serious change in the expense of producing the instrument, the productivity theorist certainly *would* claim that under these conditions there must be, if not a doubling, certainly a very substantial increase in the rate of interest."

But the increased productivity of capital will entail a decreased price, or value per unit, of the products of that capital. And in addition there may be an increase in the expense of producing the capital—if, for instance, it is reproducible only under the laws of diminishing returns or increasing costs. Evidently it does not follow that the net return on capital-value will be permanently increased.⁶ In short, the expenses of production, on the one hand, and the price of the product of the capital multiplied by the increased product itself, on the other hand, will tend to adjust themselves to each other and to the rate of interest. But this rate of interest, according to my philosophy, instead of being permanently raised, will be ultimately lowered; for to double the productivity of capital will mean ultimately a much larger income to society than before, and this larger income tends to lower the rates of impatience of those who own it. So long as the rate of interest does not fall to correspond with the lower rates of impatience, there will continue to be profit in producing the productive capital until adjustment is attained—whether by decrease in the price of the products or by increase in the cost of the capital, or both, does not matter. In any case this adjustment must be by lowering and not by raising the rate of interest; for the rate of interest cannot be raised if the rates of impatience are not raised, and the rates of impatience cannot be

* "The Impatience Theory of Interest," AMERICAN ECONOMIC REVIEW, December, 1912, p. 847.

* I understand that Professor Seager does not confine his claim (that doubling the productivity of capital would increase the rate of interest) to the period during which the doubling occurs; for he himself provides: "time being allowed for adjustments to the new conditions." In my *Rate of Interest* I devote a chapter to Invention, in which I endeavor to show that, during this transition period, the rate of interest does tend to rise *but not afterwards*.

raised if, as is assumed, the income stream is increased in size without being altered in other respects.

In short, to double the productivity of existing capital is virtually to double existing capital itself. It tends to reduce the rate of interest on much the same principle as an increase in the supply of capital tends to reduce the rate of interest. The cost of producing the capital has no important effect except to set a limit to this virtual increase in capital. Moreover, the lower the cost the less limited the increase and the greater the ultimate effect in reducing the rate of interest.

There is another direct issue⁷ between Professor Seager and me, but one which, it seems to me, is trifling. It relates to the actual limitations which prevent high rates of preference (such as those experienced by patrons of pawnshops) from being reduced by borrowing to equality with the market rate of interest on ordinary loans. I had maintained that the chief limitation was the difficulty of providing adequate security. That is, those who cannot provide the necessary security cannot borrow enough to reduce their high rates of preference to equality with the rate of interest, but Professor Seager says:⁸ "Is it not clear that the *chief* limitation is due, rather, to the small prospective incomes—aggregate incomes—of those who are most eager for present gratifications? Will Fisher maintain that the drunkard proposed for illustration has enough borrowing power to bring his impatience rate down, say, to five per cent?" Now it may be that the confirmed drunkard supposed by Professor Seager (as well as some other exceptional cases such as insane persons, idiots, and those about to commit suicide) might be unable to reduce his high rate of preference to equality with the rate of interest even if he could pledge his entire future prospects and give adequate security for payment to his creditors; but such cases are, I believe, so exceptional that they do not destroy the truth of my remark that the *chief* (not the *only*) limitation is in lack of security. In fact, I would venture the opinion that ninety-nine men and women out of one hundred of the class that patronizes the pawnshops would absolutely refuse to pledge *all* their future income in return for present ready cash, even if the market rate of interest at which they could get loans was one

⁷ AMERICAN ECONOMIC REVIEW, Dec., 1912, pp. 840-841.

⁸ *Ibid.*, p. 840.

per cent, assuming that they had to give adequate security and fully realized that as a consequence of the loan they would be confronted by starvation within a week, month, or year.

As to the minor objections in Professor Seager's article, most of them are corollaries of his main contention, and fall to the ground with it. Suffice it, therefore, to say that Professor Seager is almost as much mistaken as to my views on these subsidiary questions as he is on the main question of my "neglect" of the productivity element.

Thus: I did not dissociate my discussion completely "from any account of the production of wealth." I did not assume, except temporarily in the "first approximation," that "income-streams, like mountain brooks, gush spontaneously from nature's hill-sides"; and this was temporarily assumed, precisely as physicists temporarily assume a vacuum in studying falling bodies or, to take a better analogy, precisely as, in treating supply and demand, we first assume a fixed supply before introducing the supply schedule or supply curve. In the "second approximation" and the "third approximation" this assumption gives place to the more complicated conditions of the actual world. These complications are, for the most part, omitted (as too difficult and controversial) from the *Elementary Principles of Economics*, which Professor Seager has taken as the basis of his criticisms.

Again my strictures on the ordinary "productivity theories" are not dependent on "the putting forward of 'land' as typical of all forms of capital"⁹ or the particular definition of capital which I have used, but are, for the most part, merely a resumé of the strictures of Böhm-Bawerk whose definition of capital excludes land. I did not omit consideration of the case of "freely reproducible tools and machines."¹⁰ Nor did I neglect the possibility of negative interest in terms of any commodity or money which cannot be kept without loss,¹¹ although it appears to be true that I nowhere mentioned, as perhaps I should have done, the particular losses, which Professor Seager mentions,¹² from hoarding money—trouble, expense and risk. I quite agree with

⁹ AMERICAN ECONOMIC REVIEW, December, 1912, p. 844.

¹⁰ *Ibid.*, p. 846.

¹¹ See *Rate of Interest*, p. 84. This passage is substantially the same as that in my "Appreciation and Interest," *Publications of the American Economic Association*, vol. XI, no. 1 (Aug., 1896), p. 32, which, I think, is one of the earliest statements of the possibility of negative interest.

¹² AMERICAN ECONOMIC REVIEW, December, 1912, p. 838.

Professor Seager not only that negative interest is conceivable, but that the cessation of production would reduce and might reverse interest, just as Professor Seager says. The reason for this, according to my philosophy, is that future income would be lessened so that the income stream would be of a "descending" type. While I did not go so far as to suppose negative interest to result from the absence of production, I did suppose a case (that of shipwrecked sailors on a desert island with no supplies or real income available except hardtack)¹³ in which interest would be zero.

I think Professor Seager must also have misunderstood Böhm-Bawerk's fifty pages of reply to my criticisms on his theory. These pages of Böhm-Bawerk should of themselves have made it clear that the issue between Böhm-Bawerk and me is not as to the *importance* of a technical element but as to its character. I hope later in the "Quarterly Journal of Economics" to reply to Böhm-Bawerk's criticism of my theory and to his rebuttal of my criticism of his theory.

Were there space, I should like to take up Professor Seager's own views on interest and to examine his position on "productivity." In his article he lays himself open to the charge of regarding all productivity theories as alike sound in principle. This may not, however, be his intention. But I cannot refrain from wondering why, if he does believe, as I think everyone who has read Böhm-Bawerk should believe, that the ordinary or, as Böhm-Bawerk calls them, the "naïve" productivity theories as well as some more involved productivity theories are snares and delusions, he should have reproved me for warning the undergraduate against these snares and delusions.

Before ending this reply, I wish to reciprocate Professor Seager's kindly compliments. I am even inclined to imagine excuses for the mistakes he has made, for which, in some degree, I feel that I have myself to blame. I ought, I doubt not, to have put forward the productivity element more prominently and with less avoidance of the term "productivity." I remember consciously avoiding this term so far as possible lest the reader should associate my theory too much with the many false theories of productivity.

In closing I feel impelled to say that no other book of mine has taken so much intellectual labor as *The Rate of Interest*,

¹³ *Rate of Interest*, p. 181.

especially as regards the so-called "productivity" feature, and if, as I confidently believe, my rendering of this difficult element is sound, though not simple, I am naturally anxious that it may be properly understood to the end that it may be generally accepted.

IRVING FISHER.

Comment

Professor Fisher's reply to my review of his interest theory illustrates how difficult it is for an economist accustomed to one method of treating an intricate problem fully to enter into an entirely different method. In my thinking about the explanation of interest, the productivity aspect has seemed the most obvious as well as the most important. To Professor Fisher's mind it appears so difficult and illusive that, after having, as he now tells us, written one book chiefly to show its true place in an explanation, he found himself compelled "almost (not quite)" to omit it altogether from his treatment of the phenomenon in a second book attempting a more elementary presentation! The passages which he quotes from his *Rate of Interest* undoubtedly convict me of exaggeration in charging him with ignoring altogether the productivity aspect in his larger book. I cannot but feel, however, that these very passages and the chapters from which they are taken justify my more important contention that his treatment is "incomplete and inadequate." A methodology which causes an author to drop out an essential link when he tries to restate his theory in elementary form seems to me to be almost self-condemned. A careful re-reading of the chapters to which he refers strengthens my impression that his plan of treatment confuses rather than illuminates this phase of the subject.

But, as any reader of my article will observe, my view that Fisher fails to ascribe its proper place to productivity among the causes of interest was less an independent criticism than a conclusion from the detailed strictures on specific links in his reasoning which preceded it. I must confess that his answers to these strictures do not seem to me very convincing. Thus, his argument in support of the view that a general increase in the productivity of capital will lower, not raise, the rate of interest, seems to me to afford a demonstration, not of the truth of his contention but of the validity of my criticism that he fails to apprehend clearly the way in which productivity and time discount operate in the determina-

tion of the current rate of any given period. Again, he appears to think that my refutation of his "first approximation" is disposed of when he shows that the case I assumed was an unusual and exaggerated one. I, of course, deliberately chose the most exaggerated case I could think of because logically it was incumbent upon me to point out but one exception to his sweeping generalization to disprove it. Nor do I at all assent to Professor Fisher's view that ninety-nine out of every one hundred of the persons who frequent pawn-shops would refuse to pledge *all* their future income for ready cash even if they could get loans for one per cent. That they would not "if they fully realized that as a consequence of the loan they would be confronted with starvation within a week" goes without saying. The whole point is that improvident people do not "fully realize" the future consequences of their acts! The strenuous efforts which organized society is constantly compelled to put forth to prevent unskilled wage-earners from falling into peonage and clerks on small salaries from becoming victims of loan sharks are proof that Fisher's estimate of the extent to which forethought is developed among our fellow citizens is far too optimistic. Further, if the plausibility of his refutation of productivity theories does not arise from the fact that he habitually puts forward land as typical, this certainly seems to be the case; and if he agrees with me that a negative rate of interest is theoretically possible, he certainly seems to say just the opposite in the passage cited from *The Rate of Interest*. Finally, I cannot agree that there is any sovereign virtue in mathematical modes of thought that makes the mathematical economist less liable to overlook important aspects of the problem he is discussing than equally logical thinkers whose training has not been along mathematical lines. It was Jevons, if I mistake not, who, in the first enthusiasm over a new idea, solemnly affirmed that "value depends entirely on utility." As this classic blunder illustrates, mathematical economists are quite as prone as other thinkers to see one factor in a problem so clearly that they entirely overlook other equally important factors.

I will not take advantage of my privilege of "having the last word" to inflict further "controversial matter" on the patient readers of the REVIEW, but is it too much to ask that those who read Professor Fisher's reply to my paper will then re-read that paper itself? Only in this way can a conclusion be reached as to the points at issue that will be fair to both sides.

HENRY R. SEAGER.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Elementary Principles of Economics. By IRVING FISHER. (New York: The Macmillan Company. 1912. Pp. xxviii, 531. \$2.00.)

This is one of the most difficult books to appraise which it has been the good fortune of the reviewer to read. It is instructive, stimulating, and ably written; it contains a great deal of new material, and presents new points of view. On the other hand, it scarcely justifies its name, because, in the first place, it is not elementary; and, in the second place, it discusses only a few principles, and they seem to be confined mainly to certain favorite theories of the author which he had already set forth in other books. At any rate it appears to the reviewer that the subjects of the value of money and the relation of interest to money are developed out of all proportion to such fundamental principles as diminishing returns, rent, cost, profits, wages, standard of living, etc. It seems to be written mainly for the purpose of interpreting certain economic principles to the accountant, the business man, and the investor, rather than for the education of the lawmaker or the voter.

The author's point of view is perhaps illustrated by the statement near the beginning of chapter 1, that public problems suggest that something is wrong with the present economic order of society, and that there is a way to remedy it. But before we can treat the economic diseases, we must first understand the economic principles which these public questions involve. Now it seems to the reviewer that public questions no more imply the existence of economic diseases than do purely industrial problems. It is as reasonable to regard hunger as a disease and industry as a means of curing the disease, as it is to regard the conflict of interests among individuals as a disease, and government regulation as a means of curing that disease. All human activities, private as well as public, are concerned with the general problem of human adjustment, and the existence of such a problem always implies some degree of maladjustment. This includes even hunger and cold. The study of the nature of these maladjustments growing out of scarcity, of self-interest, or of conflict of interests, is the appropriate field for the science of economics. Public as well as

private problems grow out of these conditions, and they are normal rather than abnormal. They signify health rather than disease. The task of the economist, therefore, is to analyze these problems of adjustment for the purpose of finding out what factors and forces may be controlled by the human will and directed toward their solution. From this point of view it is superficial to say that economic science has nothing to do with public problems as such. It has to do with nothing else.

The author finds the traditional subdivision of economics into production, exchange, distribution, and consumption impracticable. One of the reasons which he gives for this finding is that distribution has in theoretical discussions "long since ceased to be a description of the processes by which food, clothing, and other goods are distributed after being produced and prior to being consumed, and has become simply a study of the determination of rent, interest, and other market magnitudes." Now it seems to the reviewer that these theoretical discussions are directly concerned with the processes by which products are distributed; for if products are to be distributed at all, they must be distributed in *some kind of proportions*. These proportions are either accidental or they are determined by laws and principles. Theoretical discussions of distribution are concerned with the laws which determine the proportions of the products of industry which are distributed between various classes prior to being consumed.

Most economists are already familiar with Professor Fisher's masterly analysis of the problem of the value of money. He has reproduced in this text his famous diagram of the balances weighted with commodities on the one side and specie and credits on the other. This, together with many other illustrations, is designed to prove conclusively, as the reviewer believes, the correctness of Professor Fisher's formula: $MV + M'V' = PT$ (p. 235). In this formula M equals the volume of money, V its velocity of circulation, while M' and V' respectively signify bank credits or substitutes for money and the velocity of their circulation. On the other side of the equation, P stands for the price level, while T represents the volume of trade.

The weakness of the discussion, however, is in the assumption that the correctness of the equation carries with it the correctness of the quantity theory of money. A little scrutiny will reveal the fact that nothing whatever is shown, either in the formula or in the argument, as to the relation between M and P , or what deter-

mines M or what determines P. In order to support the quantity theory, it must be shown that M determines P, rather than that P determines M. The opponent of the quantity theory could quite as readily adopt this formula as can one of its supporters. The opponent would maintain that P determines M. That is, when the price level rises it takes a larger number of monetary units, say dollars, to transact the business. If gold should fall in purchasing power, for example, more money would have to come into circulation in order to transact a given volume of business at the higher range of prices. What *is* it after all that determines M and P? Absolutely no light is thrown on that question.

The author's discussion of interest is in substantial harmony with current theories on the subject, both as to method and conclusion. The one important difference is that he uses one or two new terms, such as the "impatience theory" as a substitute for the "discounting of the future," which was in itself only a substitute for the "abstinence theory." The author fails, however, to distinguish between the source of interest and the factors which determine the rate of interest. He rejects the productivity theory as an explanation of the *rate* of interest, in which he is doubtless correct; but he specifically uses the impatience theory as explaining the *source* of interest, which is obviously wrong. As a matter of fact, if capital—that is, tools—were not productive, there would be no source of interest at all. The rate of interest is, of course, a matter of comparative valuation of present and future goods, as it is commonly stated, or in Professor Fisher's language, a preference for early consumable income over late consumable income (p. 374). Obviously no theory of interest is complete which does not explain both the *source* of the capitalist's income and also the *ratio* of that income to the value of his capital. The productivity theory is absolutely essential to the first, though the abstinence or impatience theory explains the second. In short, if it were not for the productivity of capital, there would be no income to capitalize. And if there were no income to capitalize, there would be no problem to be explained by means of the impatience theory.

There are so many points on which the reviewer's point of view is different from that of the author that it is difficult to avoid seeming overcritical. The reviewer wishes, therefore, to record his admiration for Professor Fisher as an acute analyst and an able controversialist. As a controversial work, or as a book de-

signed to set forth the author's peculiar views, the work before us is a model of excellence; but if it is to be appraised as an elementary treatise designed to give beginners in economics a general grasp of the science, which would seem to be implied in its title, the reviewer must frankly say that, in his opinion, it is likely to prove somewhat one-sided.

T. N. CARVER.

Wealth and Welfare. By A. C. PIGOU. (London: Macmillan and Company. 1912. Pp. xxi, 493. 8s.)

There is a current play in which the heroine says to the hero, who has just avowed his devotion in distinctly unusual terms: "How dare you tell me such an interesting thing in such a horrid way?" Professor Pigou's book has already gained well-deserved praise from Professor Edgeworth,¹ and there is little danger that its brilliant quality and significance will go unappreciated among students of economics, who should be sufficiently hardened to withstand the somewhat benumbing effect of its style. So that if the present writer seems overcritical, Professor Pigou will understand that the very merits of the work make one resent its faults the more.

The book is a general treatise with a special point of view and method of attack which put the author's personal mark on everything he touches, from index numbers to outdoor relief. The point of view is the constant inquiry how society can get the maximum satisfaction-income from economic goods and services, and the method is an unusually keen and exacting deductive analysis, fortified with citations of fact which show remarkably wide and varied knowledge. But the *a priori* reasoning ever takes first place. Indeed, the author, in discussing the relative efficiency of public and private operation of utilities, frankly throws statistics out of court, as being vitiated by the disturbing factors of each individual case, and prefers to rely on the *a priori* balancing of two forces making for efficiency and four others making against it. Fortunately, the result with which he emerges is such as to corroborate the conclusions of the statisticians.

To epitomize such a work in a review is impossible. A delicately accurate method of weighting index numbers, a discussion of wastes arising when the fruits of improvements accrue to others than the creators, and of the possibility of correcting this by

¹ In *Economic Journal*, March, 1913.

taxes and bounties, a study of the effects of union wage-systems and of the relative advantages of discharging men in slack periods versus working them part time, of the industrial effects of charity and poor relief, of exempting savings from taxation, and of the possibility of diminishing business variations—these are some of the interesting topics of which space permits but a mention.

To treat monopoly price as a problem of the most efficient marshalling of society's productive forces, rather than of just profits, is an original undertaking, and it is followed up by diagrams with a novel duplex curve of supply prices to record the complex facts of increasing and diminishing returns. The conclusion is that simple competitive prices are too high for the best results in undertakings of increasing returns, and too low in those of diminishing returns, while a wisely discriminating monopoly tends to come nearer the ideal result. But there seems to be a *non sequitur* in the argument, so far as competitive businesses of diminishing returns are concerned, since the extra cost, which the author claims the competitive price ought to cover, consists of increases in rental values of lands already under cultivation,² and hence is a mere transference of income and not an outlay of labor or capital by society as a whole. It is an interesting circumstance that the criticisms of Professor J. B. Clark's *Control of Trusts* have been largely anticipated in the second edition of that book, appearing about the same time as *Wealth and Welfare*.

The reviewer's main accusation lies against an abuse of the mathematical method, with an unnecessary burden of algebra and a dangerous reliance on ocular intuition in interpreting diagrams. If algebraical symbols lead to more accurate results, no one can rightly object to their use. In this case they lend an appearance of definiteness to conclusions whose accuracy is conditioned by the assumptions from which they proceed; assumptions which are often themselves "unverified probabilities," while the very exactness of the equation form is a temptation to choose assumptions that are far removed from life but will fit the Procrustean formula.

In discussing the mobility of labor, as affected by ignorance and by costs of movement, the author taxes the reader's actuarial understanding with the following demand:

Suppose that judgments are false, in such wise that, when comparing the marginal net product at B with that at A, people always

² See pp. 176-178. Also on pp. 196 and 206, certain of the conclusions seem to be vitiated by this fact.

attribute to it an excess over its actual value measured by K And let us suppose, further, that the costs of movement between A and B can be equated to an annual sum, spread over the period during which the unit that has moved may be expected to find profit in staying in its new place. The task of calculating this sum presents some difficulty (p. 114).

The calculation tacitly assumes, among other things, a definite rate of time-discount among necessitous people cut off from the loan market and so ignorant that their "aimless wandering" needs to be prevented by paternal guidance (p. 118). But Professor Pigou himself forgets to subtract the costs of movement from the increased product in estimating society's net gain,³ being trapped into this error as a punishment for relying on a diagram to *prove* his proposition rather than merely for clearness in presenting it. The facts which are afterward cited as examples would stand stronger alone. This is not the only passage, nor the most extreme, that suggests the caption, "Cubist portrait of an economic man," or where one feels that time has been spent in elaborating doubtful *a priori* explanations for undisputed and very interesting facts.⁴ In the matter of railroad rates, again, Professor Pigou maintains that the "cost of service" principle should be more closely followed:—a very commendable thesis, which might be supported by arguments far different from the dialectic exercise with which the author attempts to sweep away the doctrine of "joint cost" (pp. 216-217).

But it is hardly fair thus to present the author at his worst. At his best he puts the reader in his debt for many new outlooks, and he has made an enviably large contribution to dynamic economic theory.

J. M. CLARK.

Amherst College.

Die gegenwärtige Krisis in der deutschen Volkswirtschaftslehre.

By LUDWIG POHLE. (Leipzig: A Deichert'sche Verlagsbuchhandlung Nachf. 1911. Pp. xiv, 136.)

Die Volkswirtschaft der Gegenwart und Zukunft. By JULIUS WOLF. (Leipzig: A Deichert'sche Verlagsbuchhandlung Nachf. 1912. Pp. xiv, 335. 6.50 m.)

These two books are related in that the author of the first is

³ This may be verified by translating into English speech the diagram on p. 118 and the symbolic conclusions drawn therefrom.

⁴ See especially p. 243 ff., and pp. 160 and 217, footnotes.

the present editor of the "*Zeitschrift für Socialwissenschaft*," and the author of the second is the founder and former editor of that periodical; in that these two authors alike represent a minority of German economists who incline to take a position more like that of the older liberal school in England; and in that both authors aim directly and indirectly at a less political, more exactly scientific treatment of economics, than that prevalent in Germany today.

The monograph by Dr. Ludwig Pohle, professor of the *Staatswissenschaften an der Frankfurter Akademie*, is a systematic and detailed arraignment of "socialism of the chair" in Germany. It is a protest against the principle of intervention by the state in private industry so constantly invoked by members of the *Verein für Socialpolitik*. The author charges that the domination of this principle is destructive to the true scientific spirit, and cites a number of examples from current writings both on theoretical and practical questions to support his contention. He declares that at bottom the attacks of the historical school upon deductive economics were prompted by political motives, and yet the critics cannot avoid making use of the method they condemn. The author declares that "the method of the classical political economy is still the classical method of our science." He charges that the monopolistic position of the socialists of the chair in German universities is a threat to the progress of the science and that men of other views and intellectual tendencies are excluded from academic preferment.

It is evident from a note of protest (p. 6) that the group to which the author belongs has been dubbed the "Neo-Manchester-tum." There can be no doubt that there is in Germany now some reaction away from state socialism though it is confined to a small minority of scholars. These are at least performing the service of an alert opposition, subjecting to sharp criticism the utterances of the dominant party, and arguing strongly for the cultivation of a spirit of exact science in place of the blending of ethics and economics which prevails among German economists.

The second book, by Dr. Julius Wolf, professor of the *Staatswissenschaften an der Friedrich-Wilhelms Universität in Breslau*, is a reprint and amplification of a series of lectures delivered before an association of bank officials in Breslau. In semipopular form (measured by the German standard) the lecturer makes clear his attitude toward the method and development of economic study, quite in harmony with the views of Dr. Pohle. Here

is exemplified an enlightened liberalism critical of utopian speculation, but with openness to evidence of the possibilities of social reform. Most American economists will find themselves in pretty close sympathy with the author. The first four chapters deal with the main outlines of the various problems of distribution, without presenting a closely integrated system. The fifth chapter is a review of the contemporary evidence on the growth of population, and concludes that only the backward nations are likely to suffer from a real overpopulation. The author believes he has restated and corrected the doctrine of Malthus. The sixth and last chapter is a criticism of the extravagant hopes and prophecies of social progress. A review of the main features of technical invention leads the author to some forebodings and to a sobering conclusion.

In an appendix are two detailed statistical studies, the one on the relation between the birth-rate and social democracy in the several parts of Germany; the other on the history of land values in Berlin.

FRANK A. FETTER.

Princeton University.

Der Wandel des Besitzes. Versuch einer Theorie des Reichtums als Organismus. By EMANUEL SELLA. Authorized translation from the Italian by DR. BLUWSTEIN. (Leipzig: Duncker und Humblot. 1912. Pp. 98. 2.50 m.)

Professor Sella conceives of wealth (*Reichtum*) as a living whole (*ein lebendiges Ganzes*), and his object is to discover the laws of the changes which wealth as an organism undergoes. He regards society as made up of a complex of correlations, of organisms, which in turn are composed of subordinate organisms. Each organism wishes to create for itself the best possible conditions of life and is, in so far, egoistic. But if the manner in which an organism functions is such as to assist a higher organism to achieve its life purpose, then the method of action is designated *meizoflisch*. Economic *meizoflie* is elsewhere defined as a love of expansion manifested by society (*Liebe zum Grössern*, cf. p. 3). This economic *meizoflie*, "love of others," "egoism of society," is regarded as an individual manifestation of a general biological law.

As each generation transfers its wealth to the next one, the diffusion of riches strives to embrace the entire species, this ten-

dency to expand being a manifestation of economic meizofilie. Of course, there are recognized conflicts between the interests of individuals and those of the species. The existence of parasites, living at the cost of the organism, finds an analogy in the facts of human society. On the other hand, even though wealth may be harmful for certain individuals, yet for their offspring, for the whole economic society, it is useful, given this inner tendency to distribute itself throughout society (eine innere Tendenz zur Verteilung, *cf.* p. 12).

Great stress is laid upon the factor of inheritance in tracing the progress of wealth. The writer avers, that, as biological characters and likewise, in part, acquired mental qualities are transferable through inheritance, a great part of wealth is in reality to be attributed to inheritance, in so far, that is, as the individual proceeds along the path laid out for him by his ancestors. To state calmly that the inheritance of acquired mental characteristics (die anerworbenen geistigen Eigenschaften) is to a certain extent possible, and then to proceed without further demonstration, to his conclusion, is best evidence of the temerity of the economist, when he makes incursions into alien fields of knowledge.

The first part of the monograph, dealing with the "physiology" of wealth is followed by a discussion of the so-called "pathology" of wealth, which embraces a very heterogeneous subject-matter. The marriage of persons related by ties of blood is one of the topics dealt with by the author. Such a form of marriage, he says, may be regarded as the cause of a pathological type of inheritance. In this case, there results a tendency to the scattering (Zersplitterung) and partial loss of wealth, if it goes out of the hands of the economically stronger into those of persons related by accidental ties of blood. Such heirs, according to firmly established scientific knowledge (?) are the physiologically less fit. It may be asked here, whether, under certain circumstances, the children of nearly related parents may not be more fit. Certainly it is unpardonably rash to dogmatize on this point.

The relation of marriage and divorce to the growth of wealth, the effects of checks upon emigration and immigration, crises, forgotten wealth, are some of the other topics considered under the pathology of wealth.

Throughout the study, the writer makes more difficult of comprehension a necessarily complicated exposition by forcing analogies or contrasts of a biological sort, when they are not necessary to support his argument. To illustrate: after speaking of the

significance of the wife's dowry as an aid in the transmission of economic and social acquired characteristics¹ (in view of biological controversies, the mode of expression is at least unfortunate), he considers a case in which the dowry is used simply to help satisfy extravagant demands of the wife. And quite suddenly the following startling statement is introduced: "In the bee kingdom, as is known, the females kill the males after the queen bee has been impregnated. And in the economic present, the wife often devours (*verschlingt*) the husband, in that she forces him to a destructive activity, not for the sake of maintaining the species but for the satisfaction of her own vanity" (*cf.* p. 34). Parallelisms and contrasts of this rather absurdly forced sort certainly do not add clarity to the discussion.

Throughout the book there is evidence of a disposition to generalize on the basis of incomplete information, as shown, for example, in occasional references to social conditions in this country. On page 51 of the chapter on the economic development of the family, it is boldly asserted that in the United States the family connection is as loose as that existing between persons living in the same *pension*. After the death of the parents, the brothers no longer know one another.

A criticism of a more fundamental character lies against the classification of individual action. The biological standpoint, it is said, requires that every action be regarded as immoral which is harmful to the social organism. Every sort of action which is not *meizofilisch* is, therefore, harmful. Needless to say, such a classification at once invites metaphysical disputes. Such conflicts might, however, be justified, if it were apparent that one could be aided in determining the social value of institutions and activities merely by designating them moral or immoral in accordance with one's own peculiar definition of these terms.

The author is convinced that the teaching of economics will gain in clearness and simplicity, if the great laws of biology are so extended as to embrace the economic reality. On the other hand, the reviewer confesses to considerable mental bewilderment induced, it is believed, by a profusion of analogies and a heterogeneity of subject-matter. It seems too bad to add the uncertainties of biology to the admitted difficulties of economic studies.

ANNA YOUNGMAN.

Wellesley College.

¹ P. 34. So ist die Mitgift nichts als Werkzeug der Vererbung der ökonomischen und sozialen erworbenen Eigenschaften.

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Economic History and Geography

The Law of Irrigation and Water Rights. By CLESSON S. KINNEY. Four volumes. (San Francisco: Bender-Moss Company. 1912. Pp. 1,097; 1,097; 952; 1,412. \$6.75 each.)

In 1893 Mr. Kinney produced a small volume on the *Law of Irrigation and Water Rights* which was an exhaustive treatment of the subject as then developed in the United States. After twenty years, the voluminous work under review appears as a second edition. The magnitude of this new edition is in itself a significant criterion of the growth of irrigation institutions within the relatively short span of two decades. This is a unique period in Anglo-Saxon history because of the facility with which tradition-bound doctrines have been scrapped to make way for rationalistic legal and political institutions springing from the operation of forces purely economic. It is indeed gratifying to the economist that in the new West doctrines long legitimized by common law are frankly abrogated when clearly demonstrated to be inadequate or socially irrelevant.

Volume I is a veritable text in irrigation economics. It is a descriptive treatise of ancient and modern irrigation policy in many countries, together with a discussion of the public land policy of the United States in its relation to property in waters and of the classification and appropriation of inland waters for "beneficial uses." Volume II is of interest chiefly to the political scientist, being a critical treatment of theories of water rights. Its discussion is well in advance of the usual law treatise and abreast of modern political and legal philosophy. Volume III deals mainly with economic considerations of the appropriation of irrigation waters and the administrative control of their use. The respective spheres of local, state, national, and international jurisdiction over flowing waters are treated in great detail. Volume IV is a careful abstract of the existing water laws of twenty-one states and territorial possessions.

The occupation of arid America initiated the spontaneous development of a new common law which rapidly became the rule of

judicial decision and the principle of legislation qualifying and controlling proprietorship in and the utilization of inland waters. In delineating the respective dependence of certain public interests and private rights upon industrial conditions and social needs coincident with an arid climate, Mr. Kinney touches upon a theme of somewhat greater interest to economists than may appear from the caption of his work. In devoting quite a thousand pages to the economic aspects of irrigation institutions, he makes a valuable contribution to economic literature. In the opinion of the reviewer, the development and utilization of the natural resources of the West affords a suggestive hypothesis for reconstruction, or at least restatement, of prevailing tenets of economic theory in the matter of land rent and land valuation. Again, the sphere in which official supervision may legitimately be exercised in the direction of productive industry has expanded to a significant degree in this irrigation country which constitutes approximately forty per cent of the national area, excepting Alaska and the insular possessions.

RALPH H. HESS.

University of Wisconsin.

Smuggling in the American Colonies at the Outbreak of the Revolution with Special Reference to the West Indies Trade. By WILLIAM S. MCCLELLAN. David A. Wells Prize Essay No. 3. (New York: Moffat, Yard and Company. 1912. Pp. xx, 105. \$1.00.)

This essay was awarded the David A. Wells prize in political science at Williams College in 1911. Mr. McClellan describes the character of American colonial trade and the restrictions to which it was subjected by English commercial policy between 1660 and 1760. He concludes that the Navigation Acts and other restraints only slightly, if at all, interfered with the normal growth of colonial trade, and therefore caused but little smuggling. The Molasses Act of 1733, however, was designed to abolish a trade of vital importance to North America. Violations of this law receive chief attention in the essay. The government's attempt to suppress smuggling from 1760 on, combined with the effort to obtain a revenue from the trade to the foreign West Indies, created bitter resentment. The purpose of the writer is to show how a disturbance of the economic situation served to bring to the surface and develop the more deeply seated political

and constitutional tendencies toward secession from the empire. As he did not have access to the English archives he contributes no new facts to our knowledge of illicit trade. A more concrete and exhaustive history of smuggling remains to be written from the abundant manuscript materials in the British Public Record Office.

FRANK W. PITMAN.

Yale University.

The Relations of Pennsylvania with the British Government 1696-1765. By WINFRED TREXLER ROOT. Publications of the University of Pennsylvania. (New York: D. Appleton and Company. 1912. Pp. iv, 422. \$1.50.)

This volume is the most substantial contribution that has been made thus far to the history of the colonies from the Anglo-American point of view. Its scope is so much wider than its title indicates that in many respects it may be looked upon as an adequate introduction to the larger relations of the colonies as a whole to the British government, for its author in preparing to present the place of Pennsylvania in the imperial scheme has rightly felt called upon to expound at some length the character of the British system of control and to outline with some elaborateness the principles according to which the British government acted. On this account the work should appeal to all who are interested in colonial history and its problems. Such problems inevitably present themselves in different forms and under different guises according to the individual peculiarities of each colony, but at bottom the issues at stake were much the same in all and the results formed part of a common movement making for independence. The value of Dr. Root's contribution lies not only in its thoroughness and impartiality, sure witnesses to the author's zeal for a complete marshaling of the facts and freedom from local bias and patriotic prejudice, but even more in the admirably balanced treatment, whereby that which is general is made specific by embodiment in the local affairs of the colony and that which is local is interpreted in the light of the British plan of empire.

The work deals with all aspects of the subject, welding into a symmetrical whole activities that were economic, legal, and religious, as well as those that were political and constitutional. One important chapter is devoted to the colony's attitude toward the difficult problem of defense. Naturally the commercial and

financial aspects of the relationship are given prominence, for they occupied a very important place in the general scheme of British policy, but no attempt is made to single them out for exceptional treatment or to assign to them space out of proportion to their actual importance. The chapters that are likely to attract the readers of this review are four: The Administration of the Acts of Trade, The Courts of Vice-Admiralty, The Royal Disallowance, and Finance and Politics. The chapter on the administration of the acts of trade, apart from its legal and functional aspects, treats of the efforts made by the royal officials to collect the royal revenue and to check smuggling and illicit commerce; that on the vice-admiralty courts deals more specifically with the legal machinery set up in the colonies to try breaches of the acts and to enforce the civil law within the field of admiralty jurisdiction; that on the royal disallowance concerns the control exercised by the home authorities over colonial legislation and their determination to prevent the passing of acts in any way impairing the free operation of the mercantile system; while that on finance and politics presents us with a series of vexatious and troublesome problems, in which monetary conditions are so interwoven with politics on one side and trade and commerce on the other that no writer can possibly deal with them as separate factors.

Each of these chapters presents, either in part or as a whole, aspects of colonial history that are commonly called economic and are, as a rule, handed over to the economic historian as his peculiar spoil. But one does not need to be labelled an economic historian to appreciate the significance of these subjects in the general history of the colonies. Colonial history cannot be written without a due understanding of them, for, as Dr. Root shows, the colonists disregarded all royal orders and acts of Parliament that ran counter to their economic interests and rendered futile all efforts of the Home government to order their affairs by artificial measures that did not conform to their economic advantages. He quotes, apparently with approval, the assertion of Mr. A. McFarland Davis that the "royal suppression of the Massachusetts land bank was of greater influence in creating opposition to parliamentary power in Massachusetts than the Stamp Act." If economic forces played so important a part in shaping the course of colonial history, such forces can in no wise be deemed the particular property of the economic specialist. The historian

who allows the economist to stake these claims as his own is selling his historical birthright for a mess of political and military pottage.

CHARLES M. ANDREWS.

Yale University.

Why Women Are So. By MARY ROBERTS COOLIDGE. (New York: Henry Holt and Company. 1912. Pp. 371. \$1.50.)

In my opinion this book is the most concretely illuminating work that has been written on the "woman problem" since the publication of Mona Caird's *Morality of Marriage*. Any one who scrapes up even a superficial acquaintance with the current literature on this problem, one of the very few fundamental socio-economic problems as it is, knows how hastily the books are thrown together, what a reiterated sameness there is in them, and how clearly they betray the writers' fear that they will be too late to make their contribution to the woman movement's accelerated rapid progress unless they rush into print at once. Even the hardened reader of feminist literature will get little of this impression from Mrs. Coolidge's book, especially from the first two hundred pages, which deal with the "domestic traditions" and their effect upon women. It is true that Mrs. Coolidge has either advisedly or inadvertently allowed herself some repetition, but this is not a serious matter where the book is to be read by persons who have not hitherto had brought vividly to their consciousness what the actual psychological and economic effects of the domestic traditions of the nineteenth century were.

The question the author sets herself to answer is this: "Is the characteristic behavior which is called feminine an inalienable quality or merely an attitude of mind produced by the coercive social habits of past times?" "As a working hypothesis," she says, "it is assumed that the women of the nineteenth century in America were for the most part what men expected them to be; modified only by the disintegrating, and at the same time reconstructive, forces of modern society. In other words, sex traditions rather than innate sex character have produced what is called 'feminine' as distinguished from womanly behavior." That this "working hypothesis" is not an *a priori* conception for the substantiation of which the writer proceeds to distort the evidence of facts, but a conclusion forced upon her by experience and observation and in turn illuminating the facts, can scarcely be

denied by the honest reader, however reluctant he may be to view with cordial approval the psychic revolution now in process. Through the nineteenth century conventions of girlhood, essentially repressive as they were—and are—of physical, moral, and intellectual development; through marriage, the “great adventure” into which the girl entered ignorant and without preparation from her piously prudish and supinely hypocritical elders, the author takes us to the contrast between the actual conditions of the career of motherhood and the insincere sentimental laudation of it prevalent in the nineteenth century and now perpetuated by those popularizers who are churning up a frothy sentimentalism in the wake of the eugenists. The atrophying influence of the notion of domesticity as woman’s sole vocation is convincingly shown, and the probable stimulating effect on domestic management and economy of the fact that women are getting experience and perspective in other industries is pointed out. Not the least in interest and trenchantly critical insight are the chapters on the debilitating effect of clothes (fashion) on character, the virtues of subserviency, and the pursuit of dress, for which, in the main, economic causes are assigned.

The author has a keen and just appreciation of the ethical effects of economic dependence. So, too, with the uneconomical dissipation of energy in present-day domestic economy—of women “still clinging to the handicrafts of a bygone industrial period,” of the “convention that the domestic life was the economic sphere of women, although the necessary handicrafts which had made it so were all but gone.” One significance of the entrance of women into the professions was that until there was an imperative call to work outside the home, woman “could not develop the larger mind and become convinced of the futility of the conventional methods of housekeeping.” Mrs. Coolidge contents herself with pointing out these past and present influences on the psychology and efficiency (or inefficiency?) of woman. She does not, like Mrs. Gilman, attempt a specific and definite scheme of economic reform for the home and family.

Sometimes, perhaps, Mrs. Coolidge is a bit too clever in her insight and frank in her style to get an easy hearing with a certain type of masculine mind. It is true that “civilized man molded woman into the chaste image of what he himself would rather not be,” but is it—as yet—the best policy to tell him so with such brutal frankness?

To those economists who have no interest beyond the day-to-

day adjustment of the details of our economic machinery, the book will carry little appeal, but those who see in their science something not without real interconnection with the deeper problems of life will not regret having read it.

A. B. WOLFE.

Oberlin College.

Social Welfare in New Zealand. By HUGH H. LUSK. (New York: Sturgis and Walton Company. 1913. Pp. 287. \$1.50.)

The author of this book is well known in New Zealand, where he has practiced law for many years, has been a member of several parliaments and has taken a very active part in public affairs. He is, therefore, well informed on the subject, and he has written an interesting and readable book. But it is a pity that he has chosen a descriptive and laudatory rather than a discriminating and critical method of treatment. New Zealand is not an industrial paradise, and it is misleading to give the impression that all of her social experiments have been successful in every respect.

For example, in telling of the success of the state railways nothing is said of deficits; in the chapter on industrial disputes no mention is made of strikes; and in glorifying labor legislation in general no hint is given that poverty and unemployment exist, and that the working people of New Zealand, all things considered, are little, if any, more prosperous than the working classes of Australia, Canada, and the United States. Also, the prosperity of New Zealand in the past twenty years is attributed altogether to the progressive policy of the government rather than to more fundamental causes, such as the natural resources of a thinly populated country, and the invention of processes of refrigeration, by which the profits of sheep raising have been enormously increased.

A few minor errors have crept in here and there, such as the statements that the graduated land tax rose to five per cent on the market value; that the lease in perpetuity was more successful than the land tax; that the arbitration court consists of five members; that the arbitration act was first passed in 1893; that average wages have doubled in twenty years; that freight rates are lower than in America; that the policy of making advances to settlers was begun six years ago.

While a book of this character may be useful in calling atten-

tion to the successes of progressive legislation in New Zealand and exhorting the nations of the world to profit by her example, what is more needed at the present time is a series of scholarly monographs showing the strength and weakness of the various progressive movements and pointing out the paths of progress which other nations may safely take. A good beginning in this work has been made by Professor Hight, Dr. McIlwraith, and other professors and students of the University of New Zealand, but much remains to be done before the outside world will know just what contribution New Zealand is making to industrial and social progress.

J. E. LEROSIGNOL.

University of Nebraska.

Kanada. Volkswirtschaftliche Grundlagen und weltwirtschaftliche Beziehungen. By ANTON A. FLECK. Probleme der Weltwirtschaft. Schriften des Instituts für Seeverkehr und Weltwirtschaft an der Universität Kiel, 10. (Jena: Gustav Fischer. 1912. Pp. 367. 12 m.)

The prominence given Canada in this series of studies, which is planned to cover the leading countries of the world, is one of many indications of the desire felt in Germany for fuller knowledge and better relations, awakened partly by the tariff war between Canada and Germany, which lasted from 1903 to 1910, and partly by the rapid growth of the Dominion in recent years. Dr. Fleck's study is a thorough and accurate piece of work, affording a useful introductory survey of Canada's potential and actual industrial development. The author first takes stock of the natural resources available, then sketches the agricultural situation, manufactures, and railways, and concludes with an analysis of the tariff and trade relations of the Dominion. The information is taken largely from official publications, but Dr. Fleck has supplemented them by personal study on the spot. There are not many general comments or estimates throwing new light on Canadian conditions, but it would be difficult to find in any single Canadian publication as complete and detailed a summary of the factors in the industrial and commercial life of the country. One of the excellent maps issued by the Department of the Interior is reproduced in colors.

O. D. SKELTON.

Queen's University, Kingston, Canada.

Studien zur Entwicklungsgeschichte des modernen Kapitalismus.

Vol. I. *Luxus und Kapitalismus*. Vol. II. *Krieg und Kapitalismus*. By WERNER SOMBART. (Leipzig: Duncker und Humblot. 1913. Pp. viii, 220; viii, 232. 6 m. each.)

These studies are by-products of the reworking of Sombart's "Modern Capitalism." The first volume really ought to be called: "Liebe, Luxus und Kapitalismus," because it shows that through the changes in the relations between the sexes, since the period of the Crusades, the life of the ruling classes has taken on new forms, and these new forms have had a decided influence on the development of the modern economic system. In the first four chapters, Sombart discusses the growth of luxury and the secularization of love—"der Sieg des Weibchen." The wives eagerly imitated the mistresses in their expensive tastes; buildings were erected in unexampled haste, and furnished with great magnificence. "The bed was always the most costly piece of furniture." The birth of capitalism from this luxury is treated in the last and longest chapter. Almost all the important wares in international trade are shown to have been objects of luxury. The new demands also built up the silk, lace, mirror, and porcelain industries which became so important in the eighteenth century. "Thus luxury, which was, as we have seen, a legitimate child of illegitimate love, begat capitalism."

In the second volume, the question raised is, How far is capitalism the result of war? Sombart shows that military preparations have developed capital and aided the capitalistic system. Since the modern armies came into existence (in the fifteenth century), provisions, weapons, and clothing have had to be provided by the state in enormous quantities and with great rapidity. Weapons and clothing were standardized; consequently contractors were employed to provide these goods for which the state paid with money raised either from taxation or borrowing. The creditors and the contractors both became wealthy, amassing large capital. In the preparation of weapons of common calibre, especially cannon, the individual master-workmen were superseded by the capitalistic form of industry; the same was true in the manufacturing of uniforms. For the fleets, large capital was needed even earlier than in the case of the army, as the ships had to be built and provisioned for a long period.

This necessarily brief statement does not do justice to these volumes, which follow out each subject in the greatest detail and

are filled with pregnant, thought-provoking statements; *e.g.*, "Puritan, military and capitalistic virtues are to a great extent identical."

Sombart argues that the occupations in which weapons were produced were the first to take on a capitalistic form, and that the idea of the cartel first emerged in the sphere of industry which was producing for the army. He thinks that possibly the most far-reaching effect which the growing demand for weapons exercised upon the economic life was in the impetus given to the manufacturing and trade in copper, tin, and especially iron; that the use of the blast furnace was caused by the increasingly rapid demand for cannon. Probably he would not insist upon his statements that the use of coal in place of wood, or the coke process in the preparation of iron ore, were wholly the outcome of the demands of war.

This last point leads to a criticism: Sombart is fond of overstatement; *e.g.*, "Ohne den Krieg wäre er [Kapitalismus] überhaupt nicht da" (vol. II, p. 11). In volume I, he mentions grain and copper as the only two articles of international trade which were not luxuries (p. 151). In volume II, he discusses other wares which were important in international trade. In fact, the two volumes should be read together, because, as these two illustrations show, statements in one volume might be misleading if not controlled by statements in the other. The selection and use of the material is not always beyond criticism from the standpoint of historical method; but it is refreshing to find in such a study a frank recognition of the fact that the economic interpretation of history is no more false and no more true than any other single point of view in the interpretation of history.

The bibliographical notes are excellent, and show a remarkable range of reading. If the author had carried his study a little farther back, he would have cited the payments for the fleet of Richard I in 1190 and the contract made by the crusaders with Venice in 1201. The Doge's speech in connection with the latter would be especially useful for his main thesis. A knowledge of this earlier period would have prevented some slight slips, such as regarding pepper as a luxury throughout the Middle Ages, used only by the wealthy. Our main surprise, however, is that he missed so little important material. The volumes, especially the second, will be useful to historical students because of the remarkable collection of statistics, although the sources must be criticized before any data can be used.

All of Sombart's writing is suggestive, and these volumes are especially provocative of thought, because of their originality which frequently challenges traditional points of view.

D. C. MUNRO.

University of Wisconsin.

NEW BOOKS

ANDREWS, C. M. *The colonial period*. Home university of modern knowledge, 47. (New York: Holt. 1912. Pp. vii, 256. 50c.)

An excellent brief account of our colonial development. Two chapters involve a consideration of economic factors. One describes economic life and influence, but it is interpolated and not closely related with the narrative of political events. The chapter on the navigation acts and British control is superior in this respect, and the author concludes that "the measure of British colonial control can be determined only in terms that are largely economic and financial."

E. L. B.

BORGIS, W. *Wegweiser durch die Wirtschaftsverhältnisse des Königreich Ungarn*. Volkswirtschaftliche Reiseführer, 1. (Berlin: Welt-Reise Verlag. 1913. Pp. 60. 1 m.)

CARON, P. *Bibliographie des travaux publiés de 1866 à 1897 sur l'histoire de la France depuis 1789*. (Paris: Cornély. 1912. Pp. xxxix, 831.)

In this excellent bibliography, including not merely titles but also references to the reviews of the important works, numbers 11,186 to 12,796 (pp. 579-656) are devoted to economic and social history. A current bibliography in continuation is now published in connection with the "Revue d'Histoire Moderne et Contemporaine."

C. D.

DARMSTAEDTER, P. *Geschichte der Aufteilung und Kolonisation Afrikas seit dem Zeitalter der Entdeckungen*. (Berlin: G. J. Göschen. 1913. Pp. viii, 320. 7.50 m.)

FENGLER, O. *Die Wirtschaftspolitik Turgots und seiner Zeitgenossen*. (Leipzig: N. Deichert. 1913. Pp. xiii, 141. 3 m.)

FRELUP, R. *L'expansion économique française au Maroc*. (Paris: Rivière. 1913. 4 fr.)

HANOTAUX, G. *La France vivante en Amérique du Nord*. (Paris: Hachette. 1913. Pp. 263. 3.50 fr.)

Composed in large part of addresses which the author made as a member of the Champlain mission of 1912, this volume is marked by graceful expression of sentiments and ideals, and will doubtless contribute to the development of cordial relations between France and the United States as it is meant to do. The author expressly disclaims the economic point of view.

C. D.

HAYEM, J. *Mémoires et documents pour servir à l'histoire du commerce et de l'industrie en France*. Second series. (Paris: Hachette. 1912. Pp. 286, illus. 7.50 fr.)

The plan and character of this work have already been described (see the REVIEW, vol. II, p. 80). This second series publishes some contributions which are mainly of local significance, but includes also documents of first-rate importance on French industry and commerce in the eighteenth century, covering manufactures in Provence, Bas-Limousin, and the *généralité* of Orleans, the wine trade of Burgundy, and the project of a canal from Paris to Dieppe. The work continues highly creditable to editor and collaborators, and deserves every encouragement.

CLIVE DAY.

HOFFMANN, M. *Judentum und Kapitalismus*. (Berlin: H. Itzkowski. 1913. 2.50 m.)

A criticism of Sombart's *Die Juden und das Wirtschaftsleben*.

HOHLWEIN, N. *L'Egypte romaine. Recueil de termes techniques relatifs aux institutions politiques et administratives*. (Brussels: Hayez. 1912. Pp. xviii, 624.)

Contains chapters on the history of the financial institutions of the country.

KELLER, R. *Die wirtschaftliche Entwicklung des schweizerischen Mühlen-Gewerbes*. (Berne: Staempfli. 1912. Pp. x, 131.)

KOBATSCH, R. *Wegweiser durch die Wirtschaftsverhältnisse von Oesterreich*. Volkswirtschaftliche Reiseführer, 4. (Berlin: Welt-Reise Verlag. 1913. Pp. 69.)

KOPSCII, J. *Interkommunale gewerbliche Untersuchungen in Deutschland*. (Berlin: Siemenroth. 1913. Pp. x, 130. 3 m.)

LEDoux, R. *La suppression du régime corporatif dans les Pays-Bas autrichiens en 1784. Un projet d'édit. Son auteur et sa date*. (Brussels: Hayez. 1913. Pp. 56.)

LICHTENBERGER, H. *Germany and its evolution in modern times*. Translated by A. M. LUDOVICI. (New York: Holt. 1913. Pp. xxv, 440. \$2.50.)

The largest part of this book discusses the evolution of the political system, of religious and philosophical thought, and of art, in Germany of the nineteenth century. Some 60 pages at the beginning are devoted to economic development. The author has no grasp of economic principles, often abuses economic terms, and constantly sacrifices economic facts to his rhetoric. The book is constructed on the style of Lamprecht's later work, for which the author frankly avows his predilection.

C. D.

LUSCHIN VON EBENGREUTH, A. *Wiener Münzwesen im Mittelalter*. (Vienna: Carl Fromme. 1913. Pp. 75. 5.50 m.)

MARTINEZ, A. B. and LEWANDOWSKI, M. *The Argentine in the twentieth century*. Translated from the French of the third edition, by BERNARD MIALL. Revised and brought up to date. (Boston: Small, Maynard. 1913. Pp. 53, 55, 376; map. \$3.50.)

- MOHEAU. *Recherches et considérations sur la population de la France (1778)*. Introduction and table by R. GONNARD. (Paris: Rivière. 1913. Pp. 302. 12.50 fr.)
- MOORE, J. R. H. *An industrial history of the American people*. (New York: Macmillan. 1913. Pp. xiii, 496. \$1.25.)
- PROKOPOWITSCH, S. *Ueber die Bedingungen der industriellen Entwicklung Russlands*. Archiv für Sozialwissenschaft und Sozialpolitik, supplementary number 10. (Tübingen: J. C. B. Mohr. 1913. Pp. 88. 3 m.)
- REY, H. *La vie économique de la Suède*. (Paris: Plon-Nourrit et Cie. 1913. 3 fr.)
- RICHARDSON, E. C. *A union list of collections on European history in American libraries; compiled for the committee on bibliography of the American Historical Association*. Trial edition. (Princeton, N. J.: Princeton Univ. 1913. Pp. 114. \$2.)
- RIKER, C. L. *Power and control of the Gulf Stream*. (New York: Baker & Taylor Co. \$2.)
An exposition of the plan to moderate the polar climate, and, by changing the course of the Labrador current, to eliminate the atmospheric disturbances which it causes.
- SAN NICOLO, M. *Aegyptisches Vereinswesen zur Zeit der Ptolemäer und Römer*. (Munich: C. H. Beck. 1913. Pp. viii, 225. 7 m.)
- SARTORIUS VON WALTERSHAUSEN, A. *Die sizilianische Agrarverfassung und ihre Wandlungen 1780-1912. Eine sozialpolitische und weltwirtschaftliche Untersuchung*. (Leipzig: A. Deichert. 1913. Pp. xii, 385. 10 m.)
- SERING, M. *Russlands Kultur und Volkswirtschaft*. (Berlin: G. J. Göschen. 1913. 7.20 m.)
- SIEPER, E. *Deutschland und England in ihren wirtschaftlichen, politischen und kulturellen Beziehungen*. (Munich: Oldenbourg. 1913. 2.50 m.)
- SIMENON, G. *L'organisation économique de l'abbaye de Saint-Trond depuis la fin du XIII^e siècle jusqu'au commencement du XVII^e siècle*. (Brussels: Hayez. 1912. Pp. 632.)
- STAMPFLI, A. *Wegweiser durch die Wirtschaftsverhältnisse der Schweiz*. Volkswirtschaftliche Reiseführer, 2. (Berlin: Welt-Reise Verlag. 1913. Pp. 62. 2 m.)
- STEIN, M. *William Bright, captain of commerce; a story of commercial progress*. (Chicago: U. S. Pub. House. 1912. Pp. vii, 195. 50c.)
- STRAUS, W. *Die deutschen Ueberland-Zentralen und ihre wirtschaftliche Bedeutung als Kraftquelle für den Kleinbetrieb in Landwirtschaft und Gewerbe*. (Berlin: Siemenroth. 1913. Pp. v, 208. map, tables. 7 m.)

WOODBURN, J. A. *The life of Thaddeus Stevens*. (Indianapolis: Bobbs-Merrill. 1913. Pp. 620. \$2.50.)

————— *A list of manuscripts relating to the history of agriculture in Virginia*. (Richmond, Va.: State Library. 1913. Pp. 20.)

These letters, extracts, essays, etc., date from 1749 to 1879.

————— *Report of the California conservation commission for 1912*. (Sacramento: Louis R Glavis, secretary of the commission. 1913. Pp. viii, 502, illus., maps.)

————— *Statistique générale de la Belgique. Exposé de la situation du royaume, de 1876 à 1900*. (Brussels: Georges Piquart. 1913. Pp. 894.)

————— *Geographisch-statistischer Atlas der Stadt Nürnberg*. (Nuremberg: Stadtmagistrat. 1913. Pp. 64 text, 24 maps. 4.60 m.)

Teubner's Einzelkarten zur Wirtschaftsgeographie Deutschlands. (Leipzig. B. G. Teubner. 1913.)

Cenni statistici sui movimento economico dell' Italia. (Milan: Banca Commerciale Italiana. 1913.)

Agriculture, Mining, Forestry, and Fisheries

NEW BOOKS

ANDERSON, F. I. *The farmer of tomorrow*. (New York: Macmillan. 1913. Pp. vii, 308. \$1.50.)

ANDREWS, E. B. *The call of the land; popular chapters on topics of interest to farmers*. (New York: O. Judd Co. Pp. 15, 385. \$1.50.)

AVERECK, W. *Die Landwirtschaft unter dem Einflusse von Bergbau und Industrie im rheinischen Ruhrkohlengebiete*. Volkswirtschaftliche und wirtschaftsgeschichtliche Abhandlungen, 1. (Leipzig: Veit & Co. 1913. Pp. vii, 87. 2.40 m.)

BLANCHARD, E. *La main-d'oeuvre étrangère dans l'agriculture française, étude d'économie rural et sociale*. (Paris: Rivière. 1913. 5 fr.)

BOLTON, R. P. *An expensive experiment. The hydro-electric power commission of Ontario*. (New York: Baker & Taylor. Pp. 281. \$1.25.)

CRAIG, J. A. *Sheep-farming in North America*. The rural science series. (New York: Macmillan. 1913. Pp. xviii, 302, illus. \$1.50.)

FERNOW, B. E. *Forest conditions of Nova Scotia*. (Ottawa: Commission of Conservation. 1912. Pp. x, 93, maps.)

HEIZMANN, H. *Die Baumwolle, insbesondere deren Kultur, Geschichte und Handel*. Part I. *Die Kultur, Ernte und Verwendung der Baumwolle*. (Zurich: Rascher & Co. 1913. Pp. viii, 355. 10 m.)

- HOCK, A. *L'agriculture au Katanga: possibilités et réalités. Missions dans le Katanga, II.* (Brussels: Misch & Thron. 1912. Pp. 305.)
- KEUP, E. and MUHRER, R. *Die volkswirtschaftliche Bedeutung von Gross- und Kleinbetrieb in der Landwirtschaft. Untersuchungen über den Wert der innern Kolonisation im Oesten der preussischen Monarchie.* (Berlin: Parey. 1913. Pp. xxxi, 414. 9 m.)
- KOCHMANN, W. *Deutscher Salpeter. Die Erzeugung von Salpeter aus Ammoniak; ihre volkswirtschaftliche Bedeutung und Stellung in der Stickstofffrage.* (Berlin: Siemenroth. 1913. Pp. 88. 2 m.)
- LAPLAUD, M. *Essais sur l'agriculture et l'économie rurale contemporaine.* (Montmorillon: Goudaud. 1912. Pp. 147.)
- MCCANN, A. W. *Starving America.* (New York: Doran. 1913. Pp. 270. \$1.50.)
- OLIN, W. H. *American irrigation farming.* (Chicago: McClurg. 1913. \$1.50.)
- PAULI, W. *Produktionskosten-Berechnungen in bäuerlichen Betrieben. Mit besonderer Berücksichtigung der Milchproduktion.* Archiv für exakte Wirtschaftsforschung. (Jena: Fischer. 1913. Pp. xi, 333. 12 m.)
- POWELL, G. H. *Coöperation in agriculture.* (New York: Macmillan. 1913. Pp. xiii, 327. \$1.50.)
To be reviewed.
- PRATT, E. A. *Agricultural organization. Its rise, principles, and practice abroad and at home.* (London: King. 1912. Pp. xii, 259. 3s. 6d.)
The reconstitution of the Agricultural Organisation Society which "is to undergo a transition from a voluntary into a State-recognized and State-aided body," is the occasion for this new work by the author of *The Organization of Agriculture* (London, 1904). The statistical material presented is taken chiefly from the bulletins of the International Institute of Agriculture, and is summarized by countries, showing the number, membership, and total amount of business done by coöperative societies in Germany, France, Denmark, Holland, Belgium, Japan, and the United States.
- SETTEGAST, H. *Die Lehre von der Landwirtschaft.* (Leipzig: Moritz Schäfer. 1913. Pp. 32. 0.50 m.)
- TIEMANN, H. *Die Milch, ihre Gewinnung, Untersuchung, Behandlung und Verwertung.* (Leipzig: Reichenbachsche Verlagsbuchhandlung. 1913. Pp. iii, 144, illus. 3 m.)
- WEISS, F. *Grundfragen unserer Fleischversorgung. Von der landwirtschaftlichen Hochschule Hohenheim gekrönte Preisschrift.* (M. Gladbach: Volksvereins Verlag. 1913. Pp. 149. 1 m.)
- WILSON, F. H. *Coal; its origin, method of working, and preparation for the market.* (London: Pitman. 1913. Pp. 140. 1s. 6d.)
- WILLSON, W. C. *Weekly prices of butter on the Elgin board of trade,*

from 1880 to 1912, inclusive, with monthly and yearly averages; butter and egg prices, New York, Chicago, Boston and Philadelphia; with other statistical information. (Elgin, Ill.: The author. 1913. Pp. 32. 25c.)

WYGODZINSKI, W. *Die neuere Entwicklung des landwirtschaftlichen Genossenschaftswesens. Beiträge zur staats- und rechtswissenschaftlichen Fortbildung.* (Hannover: Helwing. 1913. Pp. 86. 2 m.)

Agricultural opportunities; information concerning resources, products, and physical characteristics of the western states (northern group), comprising Montana, Wyoming, Idaho, Washington, and Oregon, and the territory of Alaska. (Washington: Department of Agriculture. 1913. Pp. 32.)

Sea-fisheries of eastern Canada. Being the proceedings of a meeting of the committee on fisheries, game and fur-bearing animals, of the commission of conservation, held at Ottawa, June 4-5, 1912. (Ottawa: Commission of Conservation. 1912. Pp. 212.)

Enquête sur les salaires agricoles. (Paris: Berger-Levrault. 1913. Pp. 495. 2.50 fr.)

La réforme agraire en Russie. (Paris: Chambre de Commerce Russe de Paris. 1913.)

Manufacturing Industries

NEW BOOKS

FEITLER, S. *Technologie der landwirtschaftlichen Industrie.* Vol. I. *Die Zuckerfabrikation. Kurzgefasstes Lehrbuch für Studierende, Beamte, und Praktiker.* (Vienna: Hölder. 1913. Pp. vii, 182, illus. 4.20 m.)

HARTL, C. *Die wirtschaftliche Organisation des deutschen Braugewerbes in Vergangenheit und Gegenwart.* (Berlin: Parey. 1912. Pp. 237. 4.50 m.)

HAYDEN, A. *Kopenhagener Porzellan. Entwicklungsgeschichte der Königlichen Porzellanmanufaktur in Kopenhagen vom 18. Jahrhundert bis zur Gegenwart.* German by C. F. REINHOLD. (Leipzig: Karl W. Hiersemann. 1913. Pp. xxi, 234, illus. 48 m.)

KOCH, P. *Die deutsche Eisenindustrie und die Kriegsmarine.* (Berlin: Mittler. 1913. Pp. 40, illus. 0.50 m.)

RITTER, F. *Entwicklungen und Bestrebungen in der deutschen Portlandzementindustrie.* (Berlin: Siemenroth. 1913. Pp. viii, 252. 6.50 m.)

Year book and proceedings of the fifty-second annual convention of the United States Brewers' Association, Boston, Mass., Sept. 19-20, 1912. (New York: U. S. Brewers' Assoc. 1913.)

Les grandes industries françaises. L'industrie métal-

lurgique, by R. PINOT. *L'industrie électrique*, by P. ESCHWEGE and L. LEGOUZ. *L'industrie houillère*, by H. DE PEYERIMHOFF. (Paris: Alcan. 1913. Pp. 190. 4 fr.)

Transportation and Communication

Railroads: Rates and Regulation. By WILLIAM Z. RIPLEY. (New York: Longmans, Green, and Company. 1912. Pp. xviii, 659. \$3.00.)

This book is the first of a two volume treatise by Professor Ripley of Harvard University which is to cover the field of railway economics in the United States. The second volume, to appear shortly, will deal with the subjects of finance and organization.

Students of railway economics who have read Professor Ripley's articles as they have appeared in various periodicals during the last decade will find much that is familiar in the present volume. Indeed, although the author does not mention it, most of the chapters which constitute the present work have already appeared in print. While this does not, of course, detract from their value, it does give the work more or less the character of a volume of essays and there are many repetitions in thought, if not in language, scattered through the book.

The first chapter, which furnishes an excellent brief historical survey of the development of transportation in the United States down to the period of public regulation, covers not only the topics usually considered in histories, such as road, canal, and railway building and public land grants, but also the development of traffic and the changes in its movement which resulted from the opening of new routes of commerce. This is followed by four chapters which deal with the theory and practice of rate making, several more which discuss the subject of railway discriminations, an excellent chapter on freight classification, and two chapters which describe in masterly fashion the rate structure in the various geographical sections into which the railroads have divided the country. Chapter 12 which deals with rate wars and the movement of rates since 1870 is properly enough made to precede the last eight chapters of the book which deal with the history of federal rate regulation and the work of the Interstate Commerce Commission.

Although in the footnotes, there are frequent references to the works of other writers, Professor Ripley does not seem to have drawn much of his material from these secondary sources nor

does his interpretation of the material seem to have been much influenced by them. In the main his sources of information are the reports and decisions of the Interstate Commerce Commission and the reports of various investigating committees, congressional and otherwise. Especial use has been made of the Elkins committee report of 1905.

The chapters entitled *The Theory of Railroad Rates* seem to be improperly labeled. One naturally expects a theory of rate making to set forth the principles on which the prices of railway transportation are, or at least should be, based. This statement the above chapters do not contain. The first chapter gives a careful analysis of railway expenditures which brings out many interesting facts illustrating the variability of different operating expenses and showing how even the so-called fixed charges fluctuate with the amount of the traffic. The second chapter discusses the applicability of the law of increasing returns to railway operations, and the author shows by a statistical study of the growth of railway traffic and of operating expenses that increasing returns arise not from supposed economies in operation due to large-scale production but from "fiscal conditions attaching to the heavy capital investment."

The subjects handled in both chapters undoubtedly have a bearing on the theory of rate making but they do not of themselves constitute such a theory. It is not until we reach the chapters entitled *Rate Making in Practice* that we find a discussion of the fundamental principles of rate making. Here the author shows how the railway manager makes his rates cover terminal as well as haulage charges and how the rates necessarily decrease relatively to distance. This simple state of affairs is soon modified by the introduction of competition at certain points, as is well illustrated by the tariffs in trunk line territory. As one modifying circumstance after another—competition of markets, of classes of producers and shippers, of commodities, and of by-products—comes up for consideration, the simple distance tariff loses much of its simplicity and we feel the absence of any guiding principle. Not only the railway manager but our author seems to be groping in the dark. Of this he appears to be more or less conscious, for in his preface he says: "It may be alleged that in places, so thick are the circumstantial trees of evidence that we can scarcely perceive the wood of principle."

It is the belief of the reviewer that it is only by a strict adherence to the cost-of-service principle of measuring the reason-

ableness of rates that one can escape from this dark forest. It is not, however, by attempting to calculate the cost of each service separately that we reach satisfactory results. Professor Ripley himself shows the fallacy of this method. He apparently has not, however, grasped the idea that all that is necessary to do is to use the principle of *comparative costs*. Generally speaking, his own discussion tends to support the cost-of-service theory but he often wobbles between this principle and that of "charging what the traffic will bear," and he closes the discussion of rate making as follows:

Our final conclusion, then, must be this: That both principles are of equal importance; and that both must be continually invoked as a check upon each other. . . . Neither will stand the test of reasonableness alone. Whether the one or the other should take precedence can only be determined by a careful study of the circumstances and conditions in each case; and in practice, the instances where either principle becomes of binding effect to the entire exclusion of the other, are extremely rare (p. 184).

This is much as though an author should close a textbook on ethics with the statement that circumstances must determine whether the principle of the Golden Rule or that of "an eye for an eye; a tooth for a tooth" should be adopted.

Now the really important thing, the fundamental consideration, is that each transportation service should be performed with the least possible outlay of time and resources. If this is done, the community can well afford to pay charges based on the relative costs of performing these services. This method of operation, however, our American railways do not follow. No one has shown this so well as has Professor Ripley in the chapter entitled Problems of Routing. It is a pity that he did not retain the title given to the article when it was first published, "The Economic Wastes of Transportation," for this served to call attention to the great loss society suffers from the much boasted American policy of emphasizing low ton-mile rates. It is only by insistence on the policy of comparative costs that the wastes due to circuitous routes and reciprocal invasion of out-lying markets can be prevented. No one can doubt that such wastes would quickly cease were all the railways under a single management. Now it should be the aim of government regulation to secure these savings without incurring the disadvantages due to railway monopoly.

The author appears at his best in his account of the numerous

ways in which personal discriminations have been made in recent years and in his description of the rate structure in various parts of the country. He feels certain that rebating has not entirely ceased but is convinced that federal legislation has assisted the carriers to put a stop to the most serious of the personal discriminations. Best of all the results of this government regulation has been the moral stimulus towards fair dealing which has been given.

Professor Ripley sees little hope in the adoption of any uniform classification of freight for the country as a whole in the near future, although he readily admits the dire need of it. Much, however, has already been accomplished, he points out, by a reduction in the number of commodity tariffs and he argues that there should be a representative of the Interstate Commerce Commission on each of the classification committees "ready at all times to exert pressure for simplification and uniformity."

The chapters which deal with the history of government regulation of railroads since 1887 traverse ground which has been so often gone over by other writers that there is little opportunity presented for originality either of treatment or of subject-matter. The chapters are, however, carefully done and are interesting reading. Perhaps the thing which will be most appreciated in this part of the book is the author's discussion of the effects of the enactment of the 1906 and 1910 amendments to the act to regulate commerce and his review of the important cases in which the courts have defined the powers of the Interstate Commerce Commission. While the author withholds final judgment on the question of the desirability of continuing the Commerce Court, his review of the work of that tribunal is highly critical and, on the whole, his treatment of this subject is less convincing than that of Mr. Samuel O. Dunn in the March number of this REVIEW.

Professor Ripley's treatment of the work of the various state commissions is very inadequate and doubtless the author recognizes this as well as any one. His intention seems to have been merely to indicate the way in which the work of these commissions has tended to complicate the problem of regulation by federal authority. The decisions which have been handed down by the United States Supreme Court in the Minnesota and other state rate cases, and which have just been published, will doubtless be disappointing to the author, as they tend in the main to uphold the contentions of the governors and thus still leave plenty of

room for conflict between the state and the federal authorities.

Taken as a whole Professor Ripley's first volume seems likely to become the authoritative treatise on the subject of railway regulation by the federal government.

M. B. HAMMOND.

Ohio State University.

History of Road Legislation in Iowa. Iowa Economic History Series. *Road Legislation in Iowa.* Iowa Applied History Series, Vol. I, No. 2. By JOHN E. BRINDLEY. (Iowa City: The State Historical Society of Iowa. 1912. Pp. xiii, 422; 97.)

The State Historical Society of Iowa, under the leadership of its secretary, Professor Benjamin F. Shambaugh, has taken a much broader view of its functions than have similar societies in other states. In the *Iowa Economic History Series*, it has undertaken the investigation and publication of comprehensive studies in legislation and administration of the problems of state and local government; and in the *Iowa Applied History Series*, it presents a briefer account to make accessible to a wider circle the results of the larger studies. The numbers already issued, on such subjects as taxation, road legislation, public utilities, work accident indemnity, primary elections, and corrupt practices, present a much more thorough study of these problems in economics and public administration in Iowa than is available for any other state. Moreover, the studies include a summary of legislation in other states and a discussion of proposed legislation, which should have large results in the future legislation of Iowa, and will also be found of service in other states.

Dr. Brindley's monograph on the *History of Road Legislation in Iowa*, like his *History of Taxation in Iowa*, is based on a thorough and detailed study of the statutes and other public records, with materials from local histories and newspapers. This has necessarily involved some account of the history of township and county government, which is closely connected with local road administration. The history of local government in Iowa discloses a good deal of experimental legislation, with varying degrees of emphasis on county and township authorities. The code of 1851 established a thoroughly centralized county system, with road management vested in the county judge and county road supervisor. Two years later, provision was made for road

supervisors elected by subdistricts of the township; and the authority of the township and district officers tended to increase. In 1860 the county judge was replaced by the more decentralized county board of township supervisors; but ten years later the number of supervisors on each county board was reduced to a maximum of seven, which practically revived the earlier system of county commissioners. Since 1870 the local administration of roads has been divided between county and township authorities, a larger share of the work being done under the county officers. The later chapters discuss the good roads movement and the work of the State Highway Commission, established in 1904. While the changes in administrative organization are thus considered at length, the monograph has not attempted a detailed study of the concrete results in the construction and management of the road system. But the author does not hesitate to indicate his opinion that a greater degree of centralized administration is more favorable to a high degree of efficiency.

In the more distinctly economic problem of taxation, the history of road legislation in Iowa discloses little that is novel or peculiar to that state. The main line of development has been from the primitive system of labor taxes, the introduction and more extended use of property taxes levied and collected in money, and more recently the use of special taxes on motor vehicles.

Chapter 10 of the larger monograph presents a comparative study of road legislation in the United States, followed by an appendix summarizing the principal provisions of the road laws of each state. The condensed monograph concludes with a brief discussion of standards of road legislation. Here Dr. Brindley expresses his conclusions in favor of the township as the primary unit of local road administration for secondary roads, but favors an increase in the powers of the county authorities and the State Highway Commission.

JOHN A. FAIRLIE.

University of Illinois.

Waterways Versus Railways. By HAROLD G. MOULTON. Hart, Schaffner & Marx Prize Essays in Economics, XIII. (Boston: Houghton Mifflin Company. 1912. Pp. 468. \$2.00.)

This substantial volume of well authenticated material and interesting deductions is the outgrowth of the writer's desire to

investigate the traffic possibilities of certain proposed water routes in the United States. The study led to an examination of the relative expenses of rail and water carriage in Europe, the results of which constitute the major theme and chief value of the book. As an economic survey of canal and river transport in England, Germany, France, Belgium, and Holland, the volume is without equal.

Mr. Moulton finds that, excepting the Manchester and Kiel ship canals, the Rhine and Seine rivers, a few coal-carrying canals in France, and the larger waterways of the Netherlands, the water-borne traffic of Europe fails to command sufficient revenue to pay anything towards the maintenance and interest costs of the waterways. These costs now constitute a net loss to private investors in England and a drain on the public treasuries of Germany, France, and Belgium. Furthermore, the freight rates by water, which have provided no more than a minimum of operating expenses in the past, are not low enough to hold the business against railways although rail companies accept the traffic only under highly profitable tariffs.

After sixteen years of operation, the Manchester ship canal, the pride of England's waterways, had paid no dividends, was \$34,950 behind in its interest account and afforded little hope of improved financial condition. Prussia's annual canal deficit in 1905 was \$13,489,777, a virtual subsidy of \$3,523 per mile of waterway amounting to 7.8 per cent of the estimated cost of construction. Maintenance of navigation on the rivers of Germany averages an annual cost of \$2,000 per mile, and, despite the favorable location and flowage of German streams and the assumption of maintenance costs by the government, river transport is declining relatively.

Water traffic has developed in Germany only through the aid of government policy which compels the taxpayers to contribute an enormous sum for the support of water transportation. The railways possess decided advantages over the waterways. If the waterway subsidies were discontinued, and if attention were concentrated upon railway development, the cost of transporting the traffic of Germany might be substantially reduced (p. 254).

In France the annual interest loss on waterway investments for 1907 was \$14,400,000, calculated at 4 per cent on cost. When the cost of maintenance carried by the government is added to interest, the total approximates \$19,000,000, amounting to an annual subsidy of \$2,500 per mile or 56 cents on each ton of

freight carried. To force traffic upon the waterways, the railways of France are required to maintain charges on certain classes of freight at a differential of 20 per cent or more above water rates. Although thus prevented from competing with the boat lines, the railway companies are said to contribute \$58,200,000 to the state each year and to earn for themselves a dividend of over 4 per cent on a liberal capitalization.

It is certain that all the present freight traffic of France could easily be handled by the existing railways. The French government is heavily taxing its citizens for the support of a great system of inland waterways which is almost, if not wholly, unnecessary. It is likewise not to be doubted that the result of this mistaken transportation policy is to keep railway freight rates at a much higher level in France than would otherwise be necessary (p. 290).

An examination of the nature of canal and river traffic taken the world over reveals only five varieties of commodities which appear to be adapted to conditions of inland water transportation, *i.e.*, coal, iron ore, stone and gravel, gross agricultural products, and lumber. Lumber is rapidly declining as a traffic factor, and under most favorable conditions agriculture contributes no more than about 13 per cent of the volume of traffic necessary to justify operation.

Finally, the author concludes that physical and industrial conditions are much more advantageous to water transportation in Europe than in the United States, that all existing and potential traffic in the United States can be adequately handled by the railways and more cheaply than by water carriers, that New York's expenditure of over \$100,000,000 in the improvement of the Erie Canal is economically unjustified, and that the Lakes to the Gulf projects and the contemplated improvement of navigation on the Ohio River and other streams are sheer folly.

Mr. Moulton's manner of presentation is not quite up to the quality of his work in other respects. Occasional overemphasis and extreme deductions invite the charge of unfairness to the waterways. Repetition and discursive treatment consume many unnecessary pages. For example, on each of five pages (pp. 280, 284, 286, 289, 290) the reader is confronted with statements of identical substance concerning canal subsidies, restricted rail competition, and relative railway efficiency in France.

The percentage increases in ton mileage accredited, respectively, to the railways and waterways of Germany on page 173 should be 408 and 523 instead of 323 and 239 as printed.

Mr. Moulton's conclusions are primarily based upon the fact that waterways are not nor do they promise to become sufficiently productive of commercial revenue to defray costs of operation and maintenance and to return in addition the current rate of interest on the amount of the investment. Not all are agreed that public enterprise and private commercial undertakings should be placed in the same category in the matter of returns to capital or the earning of interest. If, as some believe, interest is a derivative of the subjective affinity of individuals for value, Mr. Moulton's reasoning touching the attitude of public policy toward waterway development is theoretically fallacious.

RALPH H. HESS.

University of Wisconsin.

NEW BOOKS

BALLEN, D. *Bibliography of the roads of the United Kingdom.* (London: King. 1913. 15s.)

A revised and greatly enlarged edition of a similar work by Mr. and Mrs. Sidney Webb, published in 1906.

CHOLEAU, J. *La navigation intérieure en Bretagne. Le canal Vilaine-Mayenne. Un canal Centre-Bretagne.* (Paris: Dunod et Pinat. 1913. 0.75 fr.)

CUENOT, M. *Rivières canalisées et canaux.* (Paris: Dunod et Pinat. 1913.)

DUNN, S. O. *The needs of the railways.* (Cambridge, Mass: The author. 1913. Pp. 38.)

Address delivered before the Graduate School of Business Administration, Harvard University, at Cambridge, December 4, 1912.

GLEED, C. S. *The rehabilitation of the Santa Fe railway system.* (Atchison, Topeka and Santa Fe Railway Co. 1913. Pp. 26.)

HUBER, M. *Einführung in das Budget-, Rechnungs- und Kassenwesen der österreichischen Staatsbahnen.* (Vienna: Hölder. 1913. Pp. viii, 223. 3.20 m.)

KETCHUM, E. S. and FITZGERALD, T. D. *The freight classification and traffic territories of the United States.* (Chicago: U. S. Commerce Assoc. 1913. Pp. 61. \$1.)

KLOESS, A. *Die deutsche Wasserwirtschaft. Grundriss der Wasserwirtschaftslehre.* (Halle a. S.: Wilhelm Knapp. 1912. Pp. vii, 132. 4 m.)

LASTEYRIE, C. *La nationalisation des chemins de fer anglais.* (Paris: Roustan. 1913. 1.50 fr.)

DE LEENER, G. *La politique des transports en Belgique.* Instituts Solvay. (Brussels: Misch et Thron. 1913. Pp. 320. 3 fr.)

LUST, H. C. and MERRIAM, R. *Digest of the decisions under the interstate commerce act.* (Chicago: The authors. 1913. Pp. 1100. \$8.)

Covers every case from January 1, 1908 to date. The volume is a continuation of the compilation by E. B. Peirce, published in 1908.

MORSE, H. B. *The trade administration of China.* New edition, revised. (New York: Longmans. 1913. Pp. xiv, 466, illus. \$3.50.)

SCHANDER, A. *Die Eisenbahnpolitik Frankreichs in Nordafrika nebst einem Ueberblick über das Problem der Transsaharabahn.* (Jena: Fischer. 1913. Pp. xxvi, 594. 20 m.)

————— *List of references to publications pertaining to the government ownership of railways.* (Washington: Bureau of Railway Economics. 1913.)

————— *Parcel post map of the United States.* (New York: L. L. Poates Pub. Co. 1913. gratis.)

————— *Report of the state roads commission of Maryland.* (Baltimore: General Assembly of Maryland. 1913. Pp. 183.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

BREZIGAR, E. *Vorboten einer Wirtschaftskrise Deutschlands.* (Berlin: Puttkamer & Mühlbrecht. 1913. Pp. iv, 61. 1.80 m.)

FISCHER, E. and SCHNEIDER, M. *Güterversand, Zollverkehr und Transportversicherung. Handbuch für Kaufleute und Industrielle. Mit einem Anhang: Aus der Exportpraxis von Welt.* (Stuttgart: Wilhelm Violet. 1912. Pp. x, 144; iii, 38. 4 m.)

HANSEN, J. *Beiträge zur Geschichte des Getreidehandels und der Getreidepolitik Lübecks.* (Lübeck: Max Schmidt. 1912. Pp. xii, 143. 5 m.)

INHULSEN, O. W. H. *Der Handel nach England und das englische Handelsrecht. Praktisches Handbuch für den deutschen Kaufmann und Juristen.* (Leipzig: Verlag der modernen kaufmännischen Bibliothek. 1913. Pp. 88. 2.75 m.)

PIGIER. *Notions générales de commerce.* (Paris: Pigier. 1913. Pp. 380. 5 fr.)

————— *Exporters' encyclopaedia, 1913.* (New York: Exporters' Encyclopaedia Co., 78 Broad St. 1913. Pp. viii, 1024. \$7.50.)

————— *Proceedings of the fourth annual convention of the Central Association of Commercial Secretaries.* (Indianapolis: The Association. 1913.)

Accounting, Business Methods, Investments, and the
Exchanges

Psychology and Industrial Efficiency. By HUGO MUENSTERBERG,
(Boston: Houghton Mifflin Company. 1913. Pp. vii, 321.
\$1.50.)

This book contemplates the ultimate development of a science of "psychotechnics" which shall stand intermediate between the methods of the psychological laboratory and the problems of industry and economics. Since the time is far distant when such a science can be presented as an exact system of facts or even as a definite method of procedure, the author contents himself with the presentation of examples designed to illustrate merely the point of view of such a science. How to find the best possible man, how to produce the best possible work, and how to secure the best possible effects are the problems set for "psychotechnics." The author offers preliminary reports of several researches conducted in his laboratory which bear more or less suggestively on these three problems. The selection of these reports is confined to those regions of applied psychology and industry which have not been systematically explored.

Tests for vocational guidance; methods of scientific management; the elimination of unfit individuals from railway, ship, and telephone service; economy of movement; the problem of fatigue and monotony; types of attention; the influence of such physical and social factors as weather, rhythm, drugs, entertainment, etc.; the effectiveness of advertisements and of commercial display; illegal imitation; buying and selling—all these topics, and similar ones, are in turn discussed as typical cases. Preliminary experiments are described, and in some cases the work of other investigators is briefly summarized. The author is commendably careful to point out that most of these experiments represent only the beginnings of investigations which, if carefully and extensively carried to a point where reliable data may be secured, may yield useful results. So far as the experiments reported are concerned, the correlations between performance in the laboratory tests and actual achievement in industrial work are so slight and so irregular as to indicate nothing more than the desirability of making more experiments. The author's recognition of the importance of emotional attitudes, interests, and inclinations, and his attempts to devise tests which shall measure an individual's ability

to grasp a "general situation" are of particular interest and value.

The chief difficulty in evaluating the book arises from the fact that it is not addressed to any particular body of readers. Psychologists will find in it little that is new; economists, little that is as yet significant; the practical industrial worker, little of immediate applicability; and it is doubtful whether the general reader will be convinced by the book that psychology has yet made any real contribution to the problems treated therein. Nevertheless the book is from several points of view distinctly satisfactory. Chief among the satisfactory features are the frequent promises that the actual data of the experimental researches are soon to be published, the conservative hopefulness of Professor Münsterberg's attitude toward the general topic, and his admirable ingenuity in conceiving problems, devising illustrative tests, and arousing popular interest in the general field.

The chief objection to books of this type lies in the danger of arousing hopes which must, from the nature of the problems raised, be long deferred. There is already a widespread general interest in the applications of psychology to industry. What is most needed now is not so much a stimulus to further hope, as concrete, intensive, and successful contributions which will serve to justify and sustain the hopes already aroused until the laborious tasks which industrial psychology sets itself have developed beyond the problematic stage.

H. L. HOLLINGWORTH.

Columbia University.

Accounting Principles. By SAMUEL F. RACINE. (Seattle: The Western Institute of Accountancy, Commerce, and Finance. 1913. Pp. xv, 280. \$3.00.)

The author's purpose in this work is to provide a complete and reliable treatise on the principles of accounting, which will "bridge the distance between bookkeeping and advanced accounting." A vast amount of material has been packed into these pages, and the whole field has been surveyed without omission of any important topic. After the initial consideration of the systems of single and double entry bookkeeping and the nature and forms of accounts, a more detailed discussion is given of the various kinds of accounts and the ways in which records in specific accounts may be most advantageously made. Then follow chap-

ters upon the more difficult subjects with which the accountant has to deal, such as capital and revenue, investments, capital assets, depreciation, good-will, subsidiary and collective accounts, reserves and reserve investments; and, subsequently, the trial balance, profit and loss and balance sheet statements claim attention. At the close of each chapter there is appended a variety of questions, taken chiefly from the C.P.A. examination papers of various states. This book will tend to give the aspirant an accurate conception of the breadth of the field of accountancy; and some of its chapters, such as those on depreciation (ch. 13), capital assets (ch. 12), and good-will (ch. 14), are well done. However, for one whose knowledge of accounts is meager it would cause much confusion; and for one who is conversant therewith it contributes little that is new.

It is regrettable that the statement of abstract principles, especially when these are not, or cannot be, stated clearly, should be left without exemplification (*e.g.*, in chs. 11 and 18 on investments and reserve investments). Certain parts of the text are almost incomprehensible; *e.g.*, "Fixed liabilities represent that portion of the capital income of an organization which is a liability of the concern as distinguished from the investment in the organization" (p. 85). Such statements, left without concrete illustration, are common (*e.g.*, pp. 95-96, on "Investments in securities in general"). There are occasional inaccuracies as to fact; for example, it is not true that the "balance sheet . . . does not contain, except probably as a footnote, any items that do not appear in the books" (p. 9). Such elements as wages, interest, taxes, etc., accrued due but unpaid, unexpired insurance, taxes, etc., paid in advance, and inventories of various kinds, are entered as integral parts of the balance sheet and not merely as footnotes. Some undesirable practices are recommended; for example, ruling the ledger to facilitate reference between debits and credits, by putting the money columns close together at the center of the page (p. 26). Arranging the ledger so as to have a money column to the right of each of those regularly in use, in order to show total debits and credits (p. 27), might lead to confusion; and, besides, the purpose intended to be served by these extra columns may be effected more simply by other means. To take the inventory on the basis of market price for use in the balance sheet, and on the basis of cost price for use in the trading account, and then to adjust the difference in the two values by

the aid of a reserve account (p. 71), would be to add a complexity which scarcely seems justifiable. Neither does it make for clearness to use "reserve account" and "reserve fund" as two distinct accounts, with almost the same name, to represent two entirely different kinds of provision for financial contingencies (pp. 172-173). Errors in the use of words or phrases are not uncommon: "only showing" (p. 3) should be "showing only"; "inversely" (p. 94) should be "conversely"; "direct" and "effecting" (p. 177) should be "directly" and "affecting." The sentence beginning, "It is also possible" (p. 101) is incomplete. Such phrases as "the day of its final *discard*" (p. 116), the "*effluxion* of time" (pp. 86, 114, 128, 166), etc., should have been altered.

The purpose for which this work was written is more admirably served by other works, such as those of Greendlinger, Hatfield, Hyans, and Cole.

W. T. JACKMAN.

University of Vermont.

Die Finanzierung nordamerikanischer Eisenbahngesellschaften.

By ERNST PICARD. (Jena: Verlag von Gustav Fischer. 1912. Pp. 196. 6 m.)

The aim of this book is to present for the consideration of German investors and governmental authorities a descriptive statement of the history and methods of American railroad finance. The subject was suggested to the author by the attitude of the German government, which is hostile to the investment of capital in foreign undertakings upon the ground that it tends to weaken the market for the securities of the government and also of domestic enterprises. The study was based upon a bibliography of something less than a hundred titles, representing the books of European writers, United States documents, and such books of American writers as were available. There are practically no specific references to sources.

In the introductory chapter is presented the significance of American railroad securities to the stock markets of Europe and America, with a brief statement of the distribution of such securities. To the American reader this chapter will be the one of most interest. Unfortunately it is too brief and too general in its discussion of European holdings; but since the book is not addressed to American readers, this cannot be counted a defect. Detailed attention is given to the legal status of railroad cor-

porations, and to the nature and extent of the support obtained by promoters. Here are two chapters in which the author has followed American writers so closely as to approach the limit of propriety. Not only is there liberal use of the paraphrase, but there are not a few instances of literal translation. Shares and bonds are considered in two carefully prepared chapters which cover familiar ground. Next is a brief but excellent discussion of the part played by financial institutions and syndicates in the issuance of securities, and a detailed consideration of consolidation. These chapters are followed by a brief description of equipment bonds and income bonds. Reorganization is treated in some detail, and full credit is given to the work of Dr. Daggett for materials. Attention is then directed to convertible bonds and short-term notes and their effect upon the investor. The final chapter is concerned with the report of the Railroad Securities Commission.

As has been said, the method of treatment is historical and descriptive. The author has stated the facts as he found them, and he has not attempted either to praise or to condemn. The result is a manual which should be of distinct service to the German investor, but one which will add little to the knowledge of the American student who is interested in the general subject of European investments in American railroad securities.

F. W. POWELL.

Chicago.

Depreciation and Wasting Assets and Their Treatment in Assessing Annual Profit and Loss. (See AMERICAN ECONOMIC REVIEW, vol. III, p. 387.)

The reason that, in accounting, the book values of wasting assets should not be marked either up or down to follow the market price of similar property, is that the property represented by the wasting assets is never in the market for sale when once it has been acquired and dedicated to the use of a particular undertaking and thus subsequent fluctuations in the market price of similar property do not affect the question of depreciation. An undertaking using wasting assets is, and for accounting purposes must always be treated as, a going concern; and a going concern will apply its wasting assets to the purposes for which they were acquired, and will not act as a dealer in the purchase and sale of such property for profit. Therefore, after the purchase of wast-

ing assets at a certain cost, be it high or low, the accounting problem is confined to the proper distribution of that cost over the years of the efficient life of the wasting assets. Suppose a machine costs \$1100 with expected life ten years and scrap value \$100, the proper provision for depreciation is \$100 a year. It makes no difference at all that in five years the market price of such a machine may have advanced to \$1500. It is still only necessary within the ten years to refund the cost of the machine which was purchased for \$1100. When it becomes necessary to purchase another machine at the end of ten years it may cost \$1500 which will need a capital outlay of \$500 in excess of that needed for the purchase of the first machine, but this circumstance does not render inadequate the allowance of \$100 per annum for depreciation on the first machine which cost only \$1100. It cannot be too clearly stated that depreciation is not a provision for the cost of future renewals, but is solely concerned with the need of replacing the cost of wasting assets already acquired, and which are being wasted in the process of earning the revenue of an undertaking.

P. D. LEAKE.

London.

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- ABBOTT, H. S. *A treatise on the law of public securities*. (Chicago: Callaghan & Co. 1913. Pp. xx, 1280. \$7.50.)
- ATKINSON, W. W. *The psychology of salesmanship*. (Holyoke, Mass.: Elizabeth Towne Co. 1912. Pp. 246. \$1.)
- BABSON, R. W. *Business barometers used in the accumulation of money; a textbook on applied economics for merchants, bankers and investors*. Sixth edition. (Wellesley Hills, Mass.: Babson's Statistical Organization. 1913. Pp. 426. \$2.12.)
- BENDER, M. T. *A digest of the bankruptcy decisions under the national bankruptcy act of 1898, reported in the American bankruptcy reports, vols. 21 to 27 inclusive*. (Albany, N. Y.: M. Bender & Co. 1913. Pp. xvi, 583. \$5.)
- BRACE, H. H. *The value of organized speculation*. Hart, Schaffner & Marx prize essays, XIV. (Boston: Houghton Mifflin. 1913. Pp. xii, 290. \$1.50.)
- BUREAU OF MUNICIPAL RESEARCH. *Handbook of municipal accounting*. (New York: Appleton. 1913. Pp. xxx, 318. \$2.)
- COLE, W. M. *Cost accounting for institutions*. (New York: Ronald Press Co. 1913. Pp. 263. \$2.50.)
- COLLINS, C. A. *Productive sales methods*. (New York: Collin Armstrong. 1913. Pp. 68.)

DEMONCEAUX and SAVIGNY. *Compatibilité des épiciers et des marchands de comestibles en gros, demigros et détail.* (Paris: Pigier. 1913. Pp. 168. 3.50 fr.)

DUBOIS, C. G. *A brief history of telephone accounting. A lecture delivered to the students of the Amos Tuck School of Administration and Finance, Dartmouth College, Hanover, N. H.* (Privately printed. 1913. Pp. 39, 28, chart.)

The author is comptroller of the American Telephone and Telegraph Company; and the history pertains more especially to developments in this company and its antecedents. After a brief introduction a rapid survey is made of telephone accounting from 1883 to 1907. Part III of the pamphlet (pp. 8-27) covers the modern period (1907-1912). It discusses the developments in business organization, also questions of publicity and public regulation; makes a classification of the principal accounts used; shows how depreciation is treated, how the different classes of revenue and expense are separated, how operating and functional standards are maintained and used; shows especially the increasing use that is made of the accounts and financial reports by the various administrative officers. Part IV (pp. 27-33) covers the period under federal control, presenting a summary of the uniform system of accounts for telephone companies, as ordered by the Interstate Commerce Commission on December 10, 1912, and placed in effect January 1, 1913. This system is required of all telephone companies doing business in two or more states, and having annual operating revenues of over \$50,000. It was worked out by the commission in coöperation with the telephone companies, and accords well with the best practice which has been previously established. There is, however, one danger in the administration of the system by the commission, that of making the system too exact and rigid. Room should be left for new developments. Accounting systems cannot be made final and absolute if they are to serve the best interest of the business and the public. JOHN BAUER.

ELBROW, G. *The new English system of money, weights, and measures and of arithmetic.* (London: King. 1s.)

ERICKSON, H. *Depreciation.* (Madison, Wis.: Democrat Printing Co. 1912. Pp. 43.)

An address delivered before the Convention of the Central Water Works Association, Detroit, Michigan, September 25, 1912, by a member of the Wisconsin Railway Commission. A brief but comprehensive discussion in which the following points are considered, all in fairly clear fashion: the nature of depreciation; its necessary inclusion in operating expense; the factors that determine the life-time of plant; how depreciation is distinguished from repairs; methods of calculating depreciation, and the effect of each upon operating costs and plant balances; the technique of recording depreciation. J. B.

FRANKLIN, B. A. *Cost reports for executives.* (New York: Engg. Mag. 1913. Pp. 149. \$5.)

GIBSON, T. *The elements of speculation*. (New York: Gibson Pub. Co. 1913. Pp. 149. \$1.)

GOBRECHT-DARRACH, C. *Valuation of the properties of public utility corporations*. (Philadelphia: Charles Gobrecht-Darrach. 1913. Pp. 61.)

GRIFFITH, W. E. *The Griffith system of rapid trial balance*. (Buffalo: G. E. Farthing. 1913. \$2.)

HABERLAND, G. *Der Einfluss des Privatkapitals auf die bauliche Entwicklung Gross-Berlins*. (Berlin: Heymann. 1913. Pp. 67. 2 m.)

HARRIS, C. L. *Harris' public land guide; showing the location of vacant lands by counties and states on July 1, 1911*. (Chicago: Peterson Linotyping Co. 1913. Pp. 727. \$5.)

JONES, E. D. *Business administration; the scientific principles of a new profession*. (New York: Engg. Mag. 1913. Pp. 49. 50c.)

KLEIN, J. J. *Elements of accounting, theory and practice*. (New York: Appleton. 1913. Pp. 14, 422. \$1.50.)

To be reviewed.

MOODY, J. *Moody's analyses of investments*. Part I: *Steam railroads*. Fourth annual number. (New York: Analyses Pub. Co. 1913. Pp. 11, 744, maps. \$15.)

MUELLER, E. *Der Grossgrundbesitz in der Provinz Sachsen*. (Jena: Fischer. 1912. Pp. 128.)

PAGE, L. *La bourse classique modernisée. Ses dangers*. (Paris: Dubois et Bauer. 1912. Pp. 55. 1.25 fr.)

POOLE. *Timber land bonds analyzed as investments for banks and trust companies*. (Chicago: C. L. Poole & Co. 1913. Pp. 80.)

RAFFETY, F. W. *Modern business practice*. (London: Gresham Pub. Co. 1913. Pp. 260. 7s. 6d.)

SAVIGNY and DEMONCEAUX. *Comptabilité des sociétés coopératives*. (Paris: Pigier. 1913. Pp. 124. 3.50 fr.)

SHATTUCK, E. W. *Method in investment*. (New York: E. W. Shattuck, 24 Stone St. 1912. Pp. 72.)

The author discusses briefly the comparative merits of various investments, but with generalizations much too sweeping. He becomes least indefinite in his discussion of "intrinsic value," for in this he uses two examples, United States Steel and Northern Pacific stock. However, he uses "intrinsic value" in two different senses in the same paragraph; first, as the amount which the shareholders would get if the property were sold; second, as "determined by the earning power" of the corporation. In his analysis of Northern Pacific he writes, "always there has been a growing business," disregarding his own later statement, "the earnings left for dividends have lately fallen off." He says: "Intrinsically, this stock is worth what it is selling at now, and perhaps more, because

there is hardly any question as to the ultimate future of the Northern Pacific in regard to earning power, whatever the immediate future may develop, either as to earnings or stock prices." This is a fair sample both of the author's reasoning and of his literary skill. He is plainly unaware of how crudely he has sketched his subject.

J. F. M.

SCHRAMMEIER, W. *Die deutsche Bodenreformbewegung.* (Jena: Fischer. 1912. Pp. vii, 67. 1 m.)

SINGER, B. *Trade mark laws of the world, and unfair trade.* (Chicago: Hammond Press. 1913. Pp. 685. \$5.)

SWOBODA, O. *Die Arbitrage in Wertpapieren, Wechseln, Münzen und Edelmetallen.* Fourteenth edition, revised by MAX FURST. (Berlin: Haude & Spener. 1913. Pp. xx, 793. 18 m.)

THOMPSON, E. E. *Washington securities, 1913 . . . with a complete record, by the month, from January 1, 1907, of sales and range of prices.* (Washington: Gibson Bros. 1913. Pp. 185.)

TIPSON, F. S. *The theory of accounts.* Second edition, revised and enlarged. (New York: Van Nostrand. 1913. Pp. 225. \$3.)

Results of public companies, company meetings, and balance sheets. (London: The Times. 1913. 21s.)

Capital and Capitalistic Organization

NEW BOOKS

BECCUE, E. *L'internationalisation des capitaux.* (Montpellier: Impr. Gén. du Midi. 1912. Pp. 432. 6 m.)

CONYNGTON, T. *A manual of corporate organization; containing information, directions and suggestions relating to the incorporation of enterprises.* Third edition. (New York: Ronald Press Co. 1913. Pp. xviii, 577. \$4.)

CORRINGTON, M. *The patent law and its administration as aids to monopoly.* (New York: Pearson Pub. Co. 1913. Pp. 63.)

DEWING, A. S. *A history of the National Cordage Company.* (Cambridge: Harvard Univ. Press. 1913. Pp. 153.)

This interesting and careful study (part of a book on "Corporate Promotions and Reorganizations") is divided into two parts. The first, 45 pages in length, being the narrative; the second, 153 pages, being a supplement or appendix containing testimony from various sources, reorganization circulars, newspaper extracts, etc. pertaining to the ill-starred but eventful history of this organization. The narrative portion of the volume is divided into two chapters, the first discussing the promotion and failure of the company, and the second the successive reorganizations of the cordage combinations. The study is most carefully done and is thoroughly commendable. It affords a wide diversity of illustrations of corporate financing and security juggling such as can hardly be found in the history of any other industrial concern. In the opinion of the reviewer, alto-

gether too much material has been placed in the footnotes. This is very likely due to the exigency of the narrative being a portion of a book in press at this writing. The writer personally, however, likes to be able to secure all of the important and fundamental points in a narrative without being obliged to refer constantly to notes at the bottom of the page.

W. S. S.

FONTAINE and others. *Concentration des entreprises industrielles et commerciales*. (Paris: Alcan. 1913. Pp. 270. 3.50 fr.)

This volume comprises an introduction by A. Fontaine, and six addresses or lectures as follows: "La concentration dans les industries de fabrication, d'entretien, etc.," by Lucien March; "Les banques privées," by F. Samazeuilh; "Le commerce d'exportation et le commerce colonial," by G. Veillat; "Le mouvement de concentration dans le commerce de détail," by Andre Sayous; "Le concentration dans la navigation maritime," by P. de Rousiers; "Les industries extractives et métallurgiques," by P. Weiss. They were delivered at the Ecole des Hautes Etudes Sociales, which has added a new section for the study of industry, commerce, and finance. The lectures present the same faults that have characterized American conferences on analogous subjects. There is a failure to confine the discussion to the subject in hand. Thus the discussion of export and colonial commerce gives little or no information in regard to concentration, which is the general subject of the addresses. The address of M. Samazeuilh is chiefly devoted to the relative merits of "établissements de crédit" and "banques privées." In regard to concentration of "commerce de détail" the lecturer admits that it is impossible to give information as to the concentration of capital (p. 159), but arrives at the rather interesting conclusion that "Les grands magasins semblent aujourd'hui moins dangereux pour lui qu'il à vingt ans ou dix ans" (p. 174). In the examination of concentration in maritime transportation, M. de Rousiers clings more closely to the subject in hand than do the other contributors. In spite of its rather general character and proneness to diversion from the main issue, the volume is interesting and profitable reading.

WILLIAM S. STEVENS.

FROST, T. G. *Incorporation and organization of corporations*. Fourth edition, enlarged and revised to January 1, 1913. (Boston: Little, Brown & Co. 1913. Pp. 925. \$6.)

GORJU, C. *Les centralizations économiques en France*. (Paris: Rivière. 1913. Pp. 94. 2 fr.)

GREENE, T. L. *Corporation finance*. (New York: Putnam. 1913.)
A new edition of a valuable book long out of print.

GREINER, F. *Die finanzwirtschaftliche Stellung der kommunalen Gaswerksunternehmen und das Problem der rationellen Licht-Kraft- und Wärmeversorgung der Stadt- und Landgemeinden*. (Munich: R. Oldenburg. 1913. Pp. 48. 1.50 m.)

HEISLER, R. C. *Federal incorporation; constitutional questions involved*. (Boston: Boston Book Co. 1913. Pp. viii, 231. \$3.50.)

- HENRY, T. C. *Tricks of the cash register trust.* (Winchester, Ky.: Winchester Sun Pr. 1913. Pp. 61. 25c.)
- HOXIE, G. L. *Some features of rate fixing for electric public service properties.* (Los Angeles, Cal.: Engineers and Architects Assn. 1913. Pp. 11. 25c.)
- JUCKENBURG, K. *Das Aufkommen der Grossindustrie in Leipzig.* Volkswirtschaftliche und wirtschaftsgeschichtliche Abhandlungen, 2. (Leipzig: Veit & Comp. 1913. Pp. viii, 188. 5 m.)
- LENZ, P. *Die Konzentration im Seeschiffahrtsgewerbe.* (Jena: Fischer. 1913. Pp. viii, 142. 4 m.)
- LIEFMANN, R. *Beteiligungs- und Finanzierungsgesellschaften.* Second edition. (Jena: Fischer. 1913. 16 m.)
- LUXEMBURG, R. *Die Akkumulation des Kapitals. Ein Beitrag zur ökonomischen Erklärung des Imperialismus.* (Berlin: Paul Singer. 1913. Pp. xi, 446. 6 m.)
- NOETHER, E. *Vertrusting und Monopolfrage in der deutschen Elektrizitäts-Industrie.* (Mannheim: J. Bensheimer. 1913. Pp. 113. 2.50 m.)
- PICK, G. *Praktische Fragen des österreichischen Kartellrechts.* (Vienna: Manz. 1913. Pp. viii, 227. 4.10 m.)
- READ, B. L. *The public, the investor and the railroads of New England.* (Boston: Financial Pub. Co. 1913. Pp. 61. 50c.)
- TABACOVICI, N. *Die Statistik der Einkommensverteilung mit besonderer Rücksicht auf das Königreich Sachsen.* Volkswirtschaftliche und wirtschaftsgeschichtliche Abhandlungen, 4. (Leipzig: Veit & Co. 1913. Pp. vii, 59. 2 m.)
- TAFEL, P. *Die nordamerikanischen Trusts und ihre Wirkungen auf den Fortschritt der Technik.* (Stuttgart: Wittwer. 1913. Pp. iii, 74. 2 m.)

Consular report on the German law of 1909 against unfair competition. (London: Wyman. 1913. 2d.)

List of references on federal control of commerce and corporations. Third edition, with additions by H. H. B. MEYER. (Washington: Library of Congress, Division of Bibliography. 1913. Pp. 164. 15c.)

Labor and Labor Organizations

Women in the Bookbinding Trade. By MARY VAN KLEECK. With an introduction by HENRY R. SEAGER. (New York: Survey Associates, Inc. 1913. Pp. xx, 270. \$1.50.)

The first of a series by the Committee on Women's Work of the Russell Sage Foundation, Henry R. Seager, chairman, Mary Van Kleeck, secretary, this volume is the promise of valuable

contributions much needed for the guidance of legislation, industrial training, and the education of the public.

The book is a model of construction, well organized, well written, and well supplemented by charts and tables. It is based on personal investigation of 210 binderies out of the 247 found in the borough of Manhattan, New York city, and interviews with 201 out of about 6,000 workers. "The material is not arranged as an argument in favor of any special social program. . . . It is designed to afford full and detailed information presented without bias, . . .". Happily, however, in the concluding chapter an excellent summary is given of "certain definite changes" required "to establish proper standards in the bookbinding trade." The chapters on wages and home conditions and irregularity of employment call for special commendation. The number for whom data were secured was too small upon which to base authoritative statement as to weekly and especially as to annual earnings but the facts presented with regard to home conditions are most significant, and surely indicative of the general situation. Thus, ". . . in only 55 per cent of the families was the father the head, while in 30 per cent the father was dead or away from home . . ." "In only half the households of the bindery women interviewed was the father a contributor."

The chapter on women's work in the binderies emphasizes rather too much the changes in the processes instead of presenting a description from which the reader may visualize the activities of the workers, and may understand the requirements made of them. The tables show great care in preparation, but the headings are often too elaborate. Case stories to illustrate statistical statements are admirably used in chapters 4 and 5, but in chapter 6 are cited too frequently for effective presentation of the subject.

In the words of Mr. Seager, the volume may be "commended to all serious students of the labor problem and to all earnest workers for better industrial conditions."

SUSAN M. KINGSBURY.

Simmons College.

Le Droit International Ouvrier. By ERNEST MAHAIM. (Paris: Librairie de la Société du Recueil Sirey. 1913. Pp. viii, 385. 6 fr.)

This volume is an expansion of a series of lectures given to the faculty of law of the University of Paris in February, 1912,

and presents a review of the international aspect of the existing laws and treaties of Europe relative to labor. The author defines his theme as that portion of international law which governs the relations of nations in matters affecting their citizen laborers. A preliminary study is made of the status of the immigrant laborer and of the native going abroad. Naturally the first appears to be the pressing problem, since domestic law can have but little extraterritorial effect, while the immigrant is in constant contact with local conditions; it is the fact, however, that the chief incentive to international treaties lies in the interest of the state in her emigrant workmen.

The author deprecates restrictive laws and discrimination of treatment, finding in the United States the most conspicuous attempts at exclusion at the present time. He is quite vigorous in his treatment of the subject, speaking of the "brutal closing of the frontiers" as a confession that the governing classes have not known how to take the measures necessary to secure the assimilation and gradual elevation of the immigrant. European countries exercise the right of expelling undesirables, but do not check economic development in such wholesale and short-sighted fashion. Permits of sojourn or cards of legitimation are used, however, the latter being classed as "an expedient of capitalist oppression," in most of the German states. In Denmark the welcome discovery is made of a law to protect aliens easily victimized by reason of their ignorance of the language and subject to the exploitation of intermediaries. It may be noted in passing that in a few of the United States, notably New York and Connecticut, statutes have been enacted with the same ends in view,—a fact which escaped notice in Professor Mahaim's account of conditions on this side of the Atlantic. Italy is said to be unique in its anticipatory care as to emigrants, concerning both their own welfare and their fitness for admission to the new country. This is considered an act of international courtesy mutually owed by the states, and treaties are recommended on the subject of exclusions and admissions, that the countries may have as careful regard for the movements of population as of commerce. Of the merely restrictive laws as such, the author holds that they express ideas of nationalism and blind patriotism on the one hand, and a form of protection of the corporate egoism of certain combinations on the other, overlooking the broader social interests and the matter of increasing prices to the consumer.

Laws on safety and hygiene and the contract of hiring are found to be of generally equal application, but insurance and relief legislation shows a variety of treatment under the various systems adopted, as well as conflicts of laws that work double hardship in requiring the maintenance of two insurances in some cases, while in others no protection is provided for workmen of certain nationalities. It is here that the need of internationalism is felt to be urgent, and the steps that have been taken to meet the needs are fully presented by the author in the third part of the volume, in which the history of labor treaties is traced from the inception of the idea to the present organized propaganda of international associations and labor offices. Existing treaties are grouped and discussed, with an account of the difficulties overcome in securing them. An appendix of sixty pages presents the text of twenty agreements and conventions on various subjects, adding largely to the value of the book as a work of reference.

While the book necessarily deals chiefly with facts, the author is arguing steadily for the international spirit, and is frank in his criticisms of the opposite attitude. It can hardly escape notice that he speaks from a standpoint of interest, being a Belgian, and one of his illustrations is of the large seasonal migration of Belgian laborers. There appears to be an adequate regard for national independence in the matter of enforcement of treaties, but the appeal is for the development of a juridical conscience that will establish a society of nations in which the interests of humanity will stand first, and those of states, governments, and territories be secondary. The plea that advanced legislation is a burden to industry is discredited by Professor Mahaim to a greater degree than would be sanctioned by the many who still offer it in opposition to such action, but his arguments and illustrations are of weight; and from any point of view the work is a valuable compilation of material and a contribution of merit in a field of growing interest and achievement.

LINDLEY D. CLARK.

Washington, D. C.

La Classe Ouvrière et les Niveaux de Vie. Recherches sur la Hiérarchie des Besoins dans les Sociétés Industrielles Contemporaines. By MAURICE HALBWACHS. (Paris: Librairie Félix Alcan. 1918. Pp. xvii, 495. 7.50 fr.)

This is a study of the class consciousness of the manual laborer with particular consideration of its manifestation in his standard

of life. The author does not agree with Professor Schmoller that class divisions are determined solely by physical and mental differences resulting from occupation, nor with Karl Bücher, who attributes them to differences in vocational opportunity and social rank created by wealth. Both factors, he holds, exert an influence. In part I, the problem is considered from the point of view of production; and in parts II and III, from the view of consumption.

The questions, Do the agricultural workers possess a consciousness of class? and If so, do they identify themselves with the group of industrial workers? are answered in the affirmative. Some of the arguments are not completely convincing, as, for example, the contention that the introduction of scientific methods of agriculture will result in large-scale farming, or that the farmer exploited by the middleman necessarily identifies himself with the industrial workers exploited in quite a different fashion. The chapter on the effect of machinery and division of labor in developing the class consciousness of the industrial workers, covers ground traversed so often that the task of the author consists in the coördination of old thought rather than the formulation of new.

In part II, on the standard of life of the working class, a careful analysis is made of the data collected in two recent German studies of family budgets, one by the Imperial German Office of Statistics, and the other by the Metal Workers' Union. The studies show that Engel's laws must be modified in some respects. In the first place, methods of expenditure do not vary precisely in accordance with changes in revenue and size of family. On the contrary, there are many fluctuations, which are attributed by the writer to the retention of a former standard of life by a family changing its economic conditions. The German studies, like some of the American ones, show that the proportion expended for rent does not, as Engel declared, remain stationary, but declines with an increase of revenue. In the case of New York city, this decline has been attributed by some to the excessively high rents, which abnormally curtail the amount devoted to other purposes by those with low incomes, and hence cause additions to revenue to be expended for these poorly satisfied needs. In his analysis of the principles of needs in part III, the author attributes this decline to the small social importance attached to lodging by the workers, who devote much of any

additional revenue to expenditures tending to elevate the social position and satisfy the social needs of themselves and their families.

The book is written in somewhat diffuse style, and the many ramifications of the subject are discussed in much detail. But the concise summaries at the end of each section enable one easily to tie together the various threads of thought. There is no discussion of the class struggle, no prediction concerning its ultimate outcome, and this self-restraint is particularly welcome in the presentation of a subject which has been too much obscured by socialistic controversy.

THEODORE W. GLOCKER.

University of Tennessee.

Die Konzentrationsbewegung bei den deutschen Gewerkschaften.

By ALEXANDER WENDE. (Berlin: Carl Heymanns Verlag. 1913. Pp. 84. 2 m.)

This monograph is a helpful analytical study of the trend toward industrial unionism, through the consolidation of national unions in allied or closely connected trades, which has characterized the German labor movement in recent years. The developments which have worked to produce consolidation, the obstacles which have retarded or prevented it, the constitutional and financial problems created by the merging into one union of previously independent craft unions varying widely in numerical strength, strategic position, financial standing, and insurance necessities and systems, and the ways in which these problems have been met by the amalgamated unions are in turn treated in outline. Throughout, the points are illustrated and supported by the citation of difficulties experienced and courses followed by particular unions.

Among the causes of this amalgamation movement, prominent place is given to the increase in and federating of employers' associations. The policies pursued by the latter organizations, themselves the effect of union activity, have in their turn cooperated noticeably with developments more universal in their operation—such as the employment in one industry of the members of several previously distinct crafts and the blurring of the distinction between the skilled and unskilled branches in manufacturing industries—in driving the separate unions to consolidation. The necessity of putting an end to jurisdictional disputes between

unions in closely connected trades also figures largely as a cause of amalgamation.

The author regards as the chief weakness of the consolidated unions the difficulty of reconciling the conflicting interests of the various crafts included within the membership. It is already evident, too, that consolidation must lead at the same time to the decentralization of administrative authority through delegation and to the lessened participation of the general membership in the decision of policies. The movement toward united action and actual consolidation will continue, he concludes, both among the unions and the employers' associations, with the result that strikes will become fewer, but vaster, and will take on more and more the character of a class war.

DAVID A. McCABE.

Princeton University.

Vers le Salaire Minimum. By BARTHELEMY RAYNAUD. (Paris: L. Larose et L. Tenin. 1913. Pp. xi, 511. 14 fr.)

In the writing of this resumé of the theory and practice of the minimum wage, the author does not attempt to make any contribution of his own, nor does he push his analysis of the theories of others very far. Minimum wage theories he classifies under three heads: those of the modern "social catholicism," those of the socialists, and that of what he calls "social utilitarianism," which is his name for the Webbs. This portion of the book is a rapid sketch, and of little value to Americans. The bulk of the volume is devoted to a survey of the progress of the minimum wage in practice, and contains accounts of the insertion of minimum wage clauses in government contracts of various sorts and in trade union wage agreements, as well as of the establishment of the minimum wage in governmental industries by official order, and in private industries by compulsory arbitration or wage boards. Most of this information can readily be found by Americans in English or domestic works. Raynaud is obviously much under the influence of the Webbs, and accepts substantially their views concerning the place of the minimum wage in the theory of wages and the modes of establishing the minimum wage in practice. The volume contains in an appendix a useful transcript of laws and administrative orders, chiefly English and Australian, relating to the legal minimum wage.

A. N. HOLCOMBE.

NEW BOOKS

BABSON, R. W. *The future of the working classes. Economic facts for English employers and wage-earners.* (London: Wilson. 1913. Pp. 76. 1s.)

BARKER, D. A. *The theory of money.* (New York: Putnam. 1913.)

BEVERIDGE, W. H. *Unemployment.* Third edition. (New York: Longmans. 1913. Pp. xvi, 405. \$2.80.)

BRENTANO, L. *Ueber Syndikalismus und Lohnminimum.* (Munich: Süddeutsche Monatshefte. 1913. Pp. 114. 1 m.)

BULLOCK, E. D., compiler. *Selected articles on trade unions.* Debaters' handbook series. (Minneapolis: H. W. Wilson Co. 1913. Pp. xxvii, 262. \$1.00.)

The articles selected for reprint, with two or three exceptions, are drawn from the popular magazines. The compiler has naturally chosen argumentative and not descriptive articles. A fairly comprehensive bibliography of the more important books and articles is included.

G. E. B.

BUNZEL, J. *Die Anfänge der modernen Arbeiterbewegung in der Steiermark.* (Leipzig: Hirschfeld. 1913. Pp. iii, 104. 3 m.)

CARCANAGUES, P. *Le mouvement syndicaliste réformiste en France.* (Paris: A. Schleicher. 1913. 3.50 fr.)

CHALLAYE, F. *Revolutionärer Syndikalismus und reformistischer Syndikalismus.* Authorized translation from the French. (Tübingen. 1913. Mohr. 1913. 1.80 m.)

CLAYTON, J. *Trade unions.* (London: Jack. 1913. 6d.)

COSTA, E. *I contratti di lavoro nei papiri greco-egizi.* (Bologne: Université de Bologne. 1912. Pp. 16.)

Includes a description of contracts of apprenticeship, of farm labor, of transportation, etc.

DEIBLER, F. S. *The amalgamated wood workers' international union of America. A historical study of trade unionism in its relation to the development of an industry.* (Madison, Wis.: Univ. of Wisconsin. 1912. Pp. 211. 40c.)

ESTEY, J. A. *Revolutionary syndicalism. An exposition and a criticism.* (London: King. 1913. 7s. 6d.)

FERENCZI, E. *Die Arbeitslosigkeit und die internationalen Arbeiterwanderungen.* (Jena: Fischer. 1913. 2.50 m.)

FIGHIERA, R. *La protection légale des travailleurs en France. Commentaire du livre II du code du travail et de la prévoyance sociale.* (Paris: Berger-Levrault. 1913. Pp. 481. 7.50 fr.)

FOOTE, A. R. *Compensation for industrial injuries.* (Columbus, O.: Ohio Journal of Commerce. 1913. Pp. 96. 10c.)

FREESE, H. *Der freie Werkvertrag und seine Gegner.* (Jena: Fischer. 1913. Pp. iv, 57. 0.50 m.)

GAEBEL, K. *Die Heimarbeit. Das jüngste Problem des Arbeiterschutzes.* (Jena: Fischer. 1913. Pp. viii, 246. 7 m.)

GEMAHLING, M. *Le salaire féminin.* (Paris: Bloud. 1913.)

HOMMER, O. *Die Entwicklung und Tätigkeit des deutschen Metallarbeiterverbandes. Ein Beitrag zum Gewerkschaftsproblem.* (Berlin: Heymann. 1912.)

KIND, R. *Der Achtstundentag für die Grosseisenindustrie.* (Düsseldorf: Verlag Stahleisen. 1913. 0.50 m.)

LICCIARDELLI-GALATIOTO, G. *Lo stato nei rapporti tra capitale e lavoro.* (Catania: N. Giannotta. 1913. Pp. 171. 3 l.)

ONEAL, J. *Sabotage; or socialism versus syndicalism, a critical study of theories and methods.* (Saint Louis, Mo.: National Rip-Saw Pub. Co. 1913. Pp. 32. 10c.)

OSBORNE, W. V. *Sane trade-unionism.* The nation's library. (London: Collins. 1913. Pp. 264. 1s.)

PATAUD, E. and POUGET, E. *Syndicalism and the coöperative commonwealth.* Translated from the French by C. and F. CHARLES. (London: New Intern. Pub. Co. 1913. Pp. 233. 2s. 6d.)

POPP, A. *The autobiography of a working woman.* (New York: F. G. Browne & Co. 1913. \$1.25.)

POUGET, E. *Sabotage.* Translated from the French with an introduction by A. M. GIOVANNITTI. (Chicago: Kerr. 1913. Pp. 108, 22. 50c.)

SPARGO, J. *Syndicalism, industrial unionism and socialism.* (New York: Huchsch. 1913. Pp. 243. \$1.25.)

STELZLE, C. *The gospel of labor.* (New York: Fleming. 1913. 50c.)

TRIDON, A. *The new unionism.* (New York: Huebsch. 1913. \$1.)

WRIGHT, T. *Sweated labour and the trade boards act.* (London: King. 1913. 6d.)

The case for the national minimum. Issued by the National Committee for the Prevention of Destitution. (London: King. 1913. Pp. 89. 1s.)

Conciliation. Tenth report of the Board of Trade of proceedings under the conciliation act, 1896, for 1912. (London: King. 1913. 11d.)

The unemployed; being the sixth report upon the work of the central (unemployed) body for London, covering the period July, 1911, to June, 1912. (London: King. 1913. 1s.)

Lois, décrets, arrêtés concernant la réglementation du travail et nomenclature des établissements dangereux, insalubres ou incommodes. (Paris: Berger-Levrault. Pp. 210. 1.50 fr.)

Die kollektiven Arbeits- und Lohnverträge in Oesterreich. (Vienna: Hölder. 1912. Pp. v, 272. 1.80 m.)

Money, Prices, Credit, and Banking

Etudes sur la Formation et le Mouvement des Prix. By MARCEL LENOIR. (Paris: M. Giard et E. Brière. 1913. Pp. viii, 201.)

The application of the principles of higher mathematics to economic phenomena has been made familiar by the work of such economists as Marshall, Jevons, Cournot, Fisher, Pareto, and others. Lenoir, in this book on the formation and the changes in price, adopts the mathematical method in order to trace the complex and confusing elements which establish prices. To the author, the diagram and the formula give brevity, clearness, and precision to economic facts, and constitute a scientific method for the determination of prices. He does not pretend to explain by this method all the elements which lead to the evaluation of commodities in terms of money, but rather to mark out the limits within which price fixing is likely to occur.

The first part of the book (pp. 5-62) deals with the theory relating to the formation of prices. Here the author shows by a series of curves and formulae how the price fixed for any given commodity on a market is the result of the equilibrium of demand and supply. Each of these factors, supply and demand, comprises two elements: the quantity of the commodity offered or demanded, and the sum of money offered or demanded in exchange. Starting with the simplest cases, those of an individual's demand and the exchange of two commodities by two individuals, the author computes the curves of indifference. The resultants of these simple curves, which are the graphic representation of individual choices and marginal utilities, give the curves of indifference for a group of consumers (the demand curve) and a group of producers (the supply curve). These group curves of indifference define the state of the market, show the possible transactions, determine the exact point of equilibrium and the price.

The second part of the book (pp. 62-161) traces the price changes in different markets of certain selected commodities—coal, wheat, cotton, and coffee. Curves are plotted which show changes in price, changes in the per capita consumption, changes in production, in importation, and in the monetary supply. In the case of each of the commodities selected the author shows that there is a very close correspondence in the maximum and the minimum points of the curves representing prices. These maxima and minima seem to fall within approximately the same periods

of time; so that for each commodity, during the nineteenth century, there is a marked regularity in the changes from low to high prices.

The causes for these price changes fall into two groups: the short, sharp oscillations in price; and the slow, gradual swing of the market. The most important influences in the first are the economic cycles and good or bad harvests; and in the second, increased or decreased consumption, improved methods of production, and the supply of money. The influence of the purchasing power of money can be traced clearly, and this seems to be the really dominant factor over long periods of time.

The author summarizes the price movement in Europe and America since 1820 in the following way:

(1) Falling prices from 1820-1848; due to a small supply of the precious metals, increase in the supply of commodities through improved processes of production, and low wages.

(2) Rising prices from 1848-1850, and a general high level of prices up to 1872; due to the abrupt increase of the gold supply, and a very active industrial demand for commodities.

(3) Falling prices from 1873-1896; due to the demonetization of silver, slackening in the gold production, and increase in the production of commodities.

(4) Rapid rise in prices since 1896. The important causes are increase in gold production, activity in the industrial demand, and, perhaps, a decrease in the supply of agricultural commodities through the increase in land values, and the extravagance of consumers.

This book contains many diagrams and formulae. In an appendix there are eighteen tables giving statistics in regard to banks; gold and silver production; price, production, and per capita consumption of wheat, coal, cotton, and coffee; and a table of index numbers. On the whole, the book is rather technical and is of little value to the reader who does not have a thorough knowledge of higher mathematics.

EVERETT W. GOODHUF.

Colgate University.

NEW BOOKS

ADAMS, E. H. *Private gold coinage of California, 1849-55, its history and its issues.* (Brooklyn: N. Y. The author, 447a State St. 1913. Pp. 28, 110. \$5.)

ARNOLD, E. G. *Untersuchungen über die Diskontierung von Buch-*

- forderungen und ihre volkswirtschaftliche Bedeutung in Deutschland.* (Munich: Duncker & Humblot. 1913. Pp. xiii, 80. 2.50 m.)
- BEAUDONUAT, E. *Les institutions de crédit foncier et la propriété rurale.* (Paris: Riviére. 1913. 3.50 fr.)
- VON BLEICHRODER, H. *Die Haftung des Bankiers aus Rat und Empfehlung.* (Leipzig: Poeschel. 1913. Pp. 110. 2 m.)
- BROWN, A. S. *The financial conspiracy of 1907; brief review of the panic, and exhibits of some of the five hundred million dollars' substitute money.* (New York: Franklin Press. 1913. Pp. 16. 25c.)
- CHARDIN, P. *Pacifique, monnaies d'extrême-orient, chinoises, coréennes, japonaises et annamites.* (Lille: René Giard. 1912. Pp. vii, 78.)
- DAVIS, C. H. *A plan for the organization of a rural banking system in the state of Virginia.* (Washington. 1913. Pp. 32.)
- DORSAINVIL, J. B. *La monnaie. La circulation fiduciaire et les échanges internationaux.* (Paris: Giard & Brière. 1913. 2.25 fr.)
- GERNGROSS, P. *Beiträge zur wirtschaftlichen Theorie des Geldes.* (Vienna: Hölder. 1913. Pp. 37. 1 m.)
- GORE, T. P. *The problem of rural credit or farm finance in the United States and a program.* (Washington. 1913. Pp. 26.)
- HAUPTMANN, C. *Die Ursachen der Teuerungen.* (Bonn: B. Hauptmann. 1913. Pp. 48. 0.50 m.)
- HOLMES, G. K. *Cold storage prices.* (Washington: Department of Agriculture, Bureau of Statistics. 1913. Pp. 116.)
- HULFTEGGER, O. *Das Notenbankwesen der Vereinigten Staaten Nordamerikas und seine Reform.* Mitteilungen aus dem handelswissenschaftlichen Seminar der Universität Zürich. (Zurich: Schulthess & Co. 1912. Pp. 47. 0.90 m.)
- JEIDELS, O. *Das Verhältnis der deutschen Grossbanken zur Industrie mit besonderer Berücksichtigung der Eisenindustrie.* Staats- und sozialwissenschaftliche Forschungen, 24. Second edition, revised. (Munich: Duncker & Humblot. 1913. Pp. 271. 6 m.)
- DE KAY, J. W. *The people's money. A brief analysis of the present position in America.* (London: Wilson. 1913. Pp. 105. 1s.)
- KNIFFIN, W. H., JR. *The savings bank and its practical work.* (New York: Bankers' Pub. Co. 1912. Pp. 6, 551. \$5.)
- MACAIGNE, A. *Comment on emploie son argent à la bourse.* (Paris: Roger. 1913.)
- MAIER, G. *Das Geld und sein Gebrauch.* Aus Natur und Geisteswelt, 398. (Leipzig: Teubner. 1913. Pp. 126. 1 m.)
- NEUBURGER, F. *Die Kriegsbereitschaft des deutschen Geld- und Kapitalmarktes.* (Berlin: Siemenroth. 1913. Pp. 120. 2.50 m.)
- NUSSBAUM, A. *Deutsches Hypothekenwesen. Ein Lehrbuch.* (Tübingen: Mohr. 1913. Pp. xv, 365. 9 m.)

OLPHE-GALLIARD, G. *Les caisses de prêts sur l'honneur*. (Paris: Giard & Brière. 1913.)

SAND, E. W. *Die Ursachen der Teuerung. Eine Studie*. (Munich: Duncker & Humblot. 1913. Pp. vi, 58. 1.50 m.)

SASPACH, F. *Verkaufspreis und Arbeitslohn*. (Berlin: Siemenroth. 1913. Pp. iii, 60. 1.40 m.)

SCHOLLER, E. *Das Münzwesen der Reichsstadt Nürnberg im 16. Jahrhundert*. (Nuremberg: J. L. Schrag. 1912. Pp. viii, 143. 5 m.)

SONNENSCHNEIN, H. *Das Bankwesen*. Vol. I. *Die Bankprüfung*. Vol. II. *Die Bankpraxis*. (Vienna: Hölder. 1913. Pp. xiv, 332; xiii, 376. 10.20 m.; 10.70 m.)

SPANN, O. *Theorie der Preisverschiebung als Grundlage zur Erklärung der Teuerungen*. (Vienna: Manz. 1913. Pp. iii, 62. 1.70 m.)

SUBERCASEAUX, G. *El papel moneda*. (Santiago: Cervantes Delicias. 1912. Pp. 406.)

TAEUBER, R. *Die Banken der Welt*. (Berlin: Verlag für Börsen- und Finanzliteratur. 1913. 15 m.)

VAN ELEWYCK, E. *La banque nationale de Belgique, les théories et les faits*. (Brussels: Falk Fils. 1913.)

WISSERING, G. and ROEST, W. A. *On Chinese currency. Preliminary remarks about the monetary reform in China*. (Amsterdam: J. H. de Bussy. 1913.)

Additional reference on the cost of living and prices. (Washington: Library of Congress. 1913. Pp. 120. 15c.)

Correspondence relating to conference on bills of exchange and cheques at The Hague, June, 1912. 6880. (London: King. 1913. 11d.)

Credit service. (Philadelphia: First Nat. Bank. 1913. Pp. 33. Gratis.)

Departmental committee on matters affecting currency of the British West African colonies and protectorates. Report. Cd. 6426. *Minutes of evidence*. Cd. 6427. (London: Wyman. 1913. 8s. 6d.; 1s. 2d.)

Report of the committee on teachers' salaries and cost of living. (Ann Arbor, Mich.: Nat. Educ. Assoc. of the U. S. 1913. Pp. xx, 328.)

Suisse. Banque de dépôt et de crédit. (Geneva: Conseil d'Administration à l'Assemblée Générale Ordinaire. 1913.)

Warenpreisberichte. Zusammengestellt von den k. k. Ministerien für Handel und Ackerbau unter Mitwirkung der k. k. statistischen Zentralkommission. (Munich: Expositur des k. k. österreichischen Handels-Museums. 1913. 52 numbers. Half year subscription 2 m.)

Public Finance, Taxation, and Tariff

The Finances of Vermont. By FREDERICK A. WOOD. Columbia University Studies in History, Economics and Public Law, Vol. LII, No. 3. (New York: Longmans, Green and Company. 1913. Pp. 147. \$1.00.)

In 1894 Dr. Wood contributed to the Columbia University series a history of taxation in Vermont. At that time he also projected a monograph covering other phases of the state's financial experience, which has now appeared after a lapse of nineteen years. Both state and local finances, including the history of taxation and other forms of revenue, the development of expenditures and the history of the state debt, are traced through the following five periods: (1) From the beginnings of settlement to independent government, in 1777; (2) the period of independent government; (3) from admission to statehood until the Civil War; (4) from the Civil War to 1878; and (5) from 1878 to date. Attention is devoted chiefly to the last three periods. Many facts relating to the history of taxation presented in the earlier study are not repeated in the present volume.

Considerable space is given to the general property tax, which had fully developed by 1842 and was at that time generally regarded as satisfactory; expenditures were small and intangible personalty unimportant. Following the Civil War, expenditures increased rapidly and complaints about the general property tax began to multiply. Since 1878 it has been gradually supplanted for raising state revenues by corporation and collateral inheritance taxes. But even now the general property tax furnishes the leading tax problem; agitation for tax reform centers about it. Two changes are widely desired, namely, abolition of offsets from the personal property tax for debts, and the adoption of a low uniform rate on intangible property. Fortunately the latter is not made difficult in Vermont, as in so many states, by narrow constitutional limitations. The farming element, however, by means of a disproportionate representation in the house of representatives, has ever been a bulwark of defense for the general property tax.

A general corporation tax was not enacted until 1882, but Dr. Wood has noted the earlier steps in the development of corporation taxes and has given a brief outline of their application to various kinds of corporations. It appears that Vermont is prac-

tically the only state in the Union which draws over fifty per cent of its corporation tax receipts from savings banks and trust companies.

Tables of receipts, expenditures, and the assessed valuation of property would have been somewhat more valuable had the classification been more detailed at certain points. The reviewer, for instance, recently had occasion to look up the cost of Vermont's penal institutions for a series of years, but was disappointed to find that Dr. Wood had lumped together in one column expenditures for "institutions" of every kind.

C. C. W.

Tariffs at Work. An Outline of Practical Tariff Administration.

By JOHN HEDLEY HIGGINSON. (London: P. S. King and Son. 1913. Pp. xiv, 136. 2s.)

The subtitle of the book clearly indicates its nature; it deals with problems involved in the administration of customs. The main part is preceded by two chapters on tariff systems and the making of a tariff. The former contains a brief explanation of the distinctive features of modern tariff systems such as the simple, the dual, and the multiple tariffs; the latter describes the machinery used by the legislative branch of the government to assist it in the preparation of tariffs, which is illustrated by the examples of the German tariff commission, the United States tariff board, and a few others. The remaining four chapters deal with ad valorem and specific duties, bonded warehouses and free ports, drawbacks, the prevention of smuggling; while the appendix contains two brief notes, one showing the striking change that has occurred in the character of the civil service in the British customs administration, the other giving an account of the origin of the bonded warehouse system. The book is the result of a trip which the author, who is connected with the British Board of Customs and Excise, made to this country in his capacity of student at the University of London. It contains no new contribution to the world's knowledge, but offers a ready reference in brief compass to a subject on which there is a scarcity of literature in the English language.

While the work bears on the whole evidences of careful observation and handling of facts, some errors have crept in. On page 10 the author mentions Greece, Russia, and Spain among other countries which have adopted Germany's conventional tariff system. This is true only with some qualifications of the two former

countries and is not true of Spain, the originator of the general and minimum system. The maximum duties under the Payne-Aldrich act were fixed at 25 per cent ad valorem over and above the minimum and not at "25 per cent in excess of the minimum schedule" as stated by the author (p. 14). On page 21 the author says, "a permanent tariff commission is now an accomplished fact in the United States." As the book bears the date of 1913, and as on page 43 reference is made to President Woodrow Wilson, the remark is but an illustration of the slowness with which news of the United States reaches even those Europeans who take an interest in transatlantic affairs. Nor is it surprising that the European mind, accustomed to some degree of consistency and continuity in governmental policy, is at a loss to keep up with the lightning changes in this country, where millions are spent in setting up new institutions one day, only to send them to the scrap heap the next, with no more heart burning than a child experiences in breaking up its house of cards.

When the author speaks (p. 43) of the coming Democratic downward tariff revision as aiming "to limit the amount of protection afforded to the various industries to the minimum supposed to be required to offset the lower costs of production in competing countries," he states what has become the Republican doctrine of protection since 1908 and what the Democratic leaders have expressly repudiated time and again, both before and since the last election.

When the author speaks of the American consul as being "chiefly interested from the point of view of his own fee" (p. 54) in certifying the value of merchandise in consular invoices, he refers to a condition which existed prior to 1906 when it was abolished under Secretary Root, so that today all consular fees are remitted to the Treasury, the consul depending solely upon his fixed salary for his compensation.

N. I. STONE.

Mathematische Theorie des Tarifwesens. Grundlagen der Kritik der Abgaben- und Preis-Tarife mit besonderer Berücksichtigung des preussischen Einkommensteuertarifs. By ANDREAS VOIGT. (Jena: Verlag von Gustav Fischer. 1912. Pp. ix, 73. 2 m.)

As suggested by the title, this monograph deals not with customs tariffs, but with the mathematical aspects of the rate sched-

ules used in taxation and transportation. There are three chapters discussing respectively the different types and general characteristics of such tariffs, examples of faulty tariff making, and the construction of mathematically consistent rate schedules. No attempt is made to invade the province of the economist or lawmaker. The fundamental conditions of rate determination are fixed by historical and social factors; but accepting these premises as interpreted by the legislator, the author shows in a very interesting and scholarly way that the failure to develop and apply them mathematically results in internal inconsistencies and aberrations plainly not contemplated or desired by the legislative authority that adopted the schedule of rates. In other words, the legislator needs the services of a mathematician in determining the details of his rate scheme. This is illustrated in a convincing way by an analysis of the rates of the Prussian income tax which upon examination are found at a few places to be regressive and at many places to progress erratically.

Besides supplying a careful analysis of the fundamental mathematical requirements of rate making and many helpful illustrations of the different types of tax and freight tariffs employed in different parts of Europe, the author develops in the third chapter a number of interesting and relatively simple formulae by which even the non-mathematical student may smooth a rate tariff, keep it continuously progressive or regressive—if a regressive tariff is desired—and eliminate those incongruities which irritate the mathematical mind and cause in practice no little injustice. Starting with the assumptions drawn from the Prussian income tax that the rate for an income of 900 marks should be two thirds of one per cent, for an income of 1200 marks one per cent, and for an income of 100,000 marks five per cent, the author reconstructs the rate tariff of the Prussian income tax, and shows that the new progression would be not only more regular and logical than that embodied in the present tariff, but that the “reconstructed” rates would be slightly lower for incomes of 10,000 marks and noticeably higher for those of 30,000 marks. An interesting bi-product of this analysis is the conclusion that the progression should not logically stop at five per cent for incomes above 100,000 marks, as in the present tariff, but should continue indefinitely, and that if it did so continue the rate upon an income of 1,000,000 marks would be 6.06 per cent, upon an income of 10,000,000 marks 6.74 per cent, and upon an income infinitely large 8 per cent.

One regrets the absence of new light upon fundamental problems, such as the propriety of applying the rate schedule for individuals to corporations and joint-stock companies, the ultimate limit of progressive rates upon very large incomes, and the proper factors with which to determine the primary exemption; but, after all, these are economic problems and not within the scope of the present study. Within its limits the monograph is useful and important and with careful reading may be both understood and used by the non-mathematical reader.

T. S. ADAMS.

Wisconsin Tax Commission.

NEW BOOKS

BEDALL, A. *Besteuerung der juristischen Personen im Allgemeinen und insbesondere der Stiftungen, Vereine, Gesellschaften etc. nach den neuen Steuergesetzen vom 14.8.1910 und nach dem Umlagegesetz.* (Munich: J. Schweitzer. 1913. Pp. 39. 1 m.)

BEGEMANN, E. *Die Finanzreformversuche im deutschen Reiche von 1867 bis zur Gegenwart, unter Berücksichtigung der Deckung der Wehrvorlagen von 1912.* (Göttingen: Vandenhoeck & Ruprecht. 1912. Pp. 146. 3.60 m.)

BORCHARD, C. *Die Wirkungen der Getreidezölle auf die Getreidepreise. Mit einem Anhang: Die Gregory Kingsche Regel.* (Berlin: R. Trenkel. 1913. Pp. 67, 94. 3 m.)

BURGIS, E. and JACKSON, W. V. *Fiscal lights searching the industrial question.* (London: Sherratt & Hughes. 1913. Pp. 92. 1s.)

DAVEY, H. *The law of rating.* (London: Stevens & Sons. 1913. 30s.)

DEVILLE, F. *Les contrôles financiers internationaux et la souveraineté de l'état.* (Paris: Charles-Lavauzelle. 1913.)

Is concerned with the financial situation in the Balkan States.

DOWELL, S. *The acts relating to the income tax.* Seventh edition, revised by J. E. PIPER. (London: Butterworth. 1913. 22s.)

EATON, A. M. *Free trade versus protection.* (Chicago: McClurg. 1913.)

ERDMANN-GERHART, P. *Die Besteuerung des Kinder- und Gattenerbes.* (Halle: C. A. Kaemmerer. 1913. Pp. 30. 0.50 m.)

GERLOFF, W. *Die Finanz- und Zollpolitik des deutschen Reiches nebst ihren Beziehungen zu Landes und Gemeindefinanzen von der Gründung des Norddeutschen Bundes bis zur Gegenwart.* (Jena: Fischer. 1913. Pp. xvi, 553. 14 m.)

HENNINGSSEN, A. *Die gleitende Skala für Getreidezölle.* (Jena: Fischer. 1913. Pp. xiv, 116. 5.50 m.)

- JOHANNSEN, N. *Die Steuer der Zukunft und ihre Einwirkung auf geschäftliche Depressionen und volkswirtschaftliche Verhältnisse.* (Berlin: Puttkammer & Mühlbrecht. 1913. Pp. 456. 8 m.)
- JONES, W. *National and municipal finance.* (London: King. 1913. Pp. x, 167. 1s.)
- KARPAS, J. *Klassenlotterie und Rentenkurse. Ein zeitgemässer Vorschlag zur Hebung der Staatsrentenkurse.* (Vienna: Carl Konegen. 1913. Pp. 50. 1 m.)
- KELLY. *Customs tariffs of the world, 1913.* (London: Kelly's Directories. 10s.)
- KEYNES, J. M. *Indian currency and finance.* (London: Macmillan. 1913. Pp. viii, 263. 6s.)
To be reviewed.
- LERIS, P. *Les dettes comparées des villes de France.* (Paris: Alcan. 1913. 2 fr.)
- LEVY, J. *Das Oktroi in Elsass-Lothringen.* (Strassburg: C. F. Schmidt. 1913. Pp. 91. 1.50 m.)
- MEYNEN, E. O. *Die Erbschaftssteuer im internationalen Rechte.* (Berlin: E. Frensdorf. 1912. Pp. 53. 1.50 m.)
- PEEL, G. *The tariff reformers.* (London: Methuen. 1913. Pp. 198. 2s. 6d.)
- PIERSON, N. G. *Les revenus de l'état.* (Paris: Giard & Brière. 1913.)
- PILGER, W. *Der Tabakwertzoll. Erläuterungen zu den Vorschriften des Tabaksteuergesetzes von 15.7.1909 über den Tabakwertzoll und zur Tabakzollordnung.* (Berlin: Trowitzsch & Sohn. 1913. Pp. 276. 6 m.)
- RANDOLPH, J. F. *New Jersey inheritance and transfer tax laws.* (Newark, N. J.: Soney & Sage. 1913. Pp. 183. \$2.50.)
- SCHMIDT, W. *Das hessische Einkommensteuergesetz vom 12.8.1899 in der Fassung des Gesetzes vom 22.12.1909.* (Mainz: J. Diemer. 1913. Pp. iii, 215. 3 m.)
- STOREY, H. *Economics of land value.* (London: Unwin. 1913. Pp. 124. 1s.)
- TANGORRA, V. *Saggio sulla domanda e l'offerta dei servizi pubblici.* (Pisa: Stabil. Tipog. Toscano. 1912.)
- TENERELLI, F. G. *Le finanze comunali.* (Rome: Societa Editrice Libreria. 1913. Pp. 450. 12 l.)
- TURNER, E. H. *The repayment of local and other loans: sinking funds.* (New York: Ronald Press. 1913. Pp. xxvii, 536. \$6.)
- WRIGHTINGTON, S. R. and ROLLINS, W. A. *Tax exempt and taxable investment securities.* (Boston: Financial Pub. Co. 1913. Pp. 234. \$5.)

Comparative cost of municipal services. 1559. (London: London County Council. 1913. 6d.)

There are two diagrams showing (a) net cost, and (b) cost falling on rates of municipal services per capita in towns above 100,000 population.

Receipts and expenditures of ordinary revenue. Special publications, 19. (Boston: Statistics Dept. 1913. Pp. 170.)

Returns relating to the rates of import duties levied upon articles imported into the British self-governing dominions, crown colonies, possessions and protectorates, so far as notified to the Board of Trade in October, 1912. Cd. 6476. (London: Wyman. 1912. 3s. 3d.)

State and local taxation; sixth annual conference, under the auspices of the National Tax Association, held at Des Moines, Iowa, September 3 to 5, 1912; addresses and proceedings. (Madison, Wis.: National Tax Assoc. 1913. Pp. 13, 558. \$3.)

Treasury system of the United States. (New York: Banking Law Journ. 1913. \$2.)

Le concours pour l'emploi de contrôleur adjoint des douanes. (Paris: Berger-Levrault. 1913. Pp. 44. 0.75 fr.)

Population and Migration

The Immigrant Invasion. By FRANK JULIAN WARNE. (New York: Dodd, Mead and Company. 1913. Pp. 336. \$2.50.)

The New Immigration. A Study of the Industrial and Social Life of Southeastern Europeans in America. By PETER ROBERTS. (New York: The Macmillan Company. 1912. Pp. xix, 386. \$1.60.)

The Immigrant. An Asset and a Liability. By FREDERIC J. HASKIN. (New York: Fleming H. Revell Company. 1913. Pp. 251. \$1.25.)

In *The Immigrant Invasion* Dr. Warne has given us a suggestive study of the economic aspects of immigration that is both a history of the past and a warning for the future. The warning is familiar to us—namely, that unrestricted immigration is a menace to our civilization, through its effect upon wages and the standard of living; and Dr. Warne urges that our gates should be guarded against these singly, silently, and peacefully entering hosts as strictly as the gates of Rome against any horde of Gauls or Goths.

The facts upon which such warnings are based, however, are not usually so freely offered. So the especial interest and value

of Dr. Warne's book lies in the detailed exposition he has given of the economic history of immigration, not simply as an isolated current, but in its relation to the general economic development of the country. He shows the earlier streams of immigration directed and diverted in connection with the agricultural development of the West through free labor, of the South through slave labor. He then shows us the change from agricultural to industrial demand in the eighties, in relation to the change in racial composition of immigration then beginning, and the unfavorable social conditions coming to public attention together with that change.

Which is cause and which is effect? Most advocates of restriction consider the change in racial character a leading cause of social and industrial degradation. The opposite point of view—that the industrial system itself is the determining factor in economic and social stratification, grinding out a definite proportion of underpaid, unskilled workers, fixed according to the special processes of the industry concerned, regardless of the human material poured into its hopper—has been ably defended by Dr. Hourwich in *Immigration and Labor* (see REVIEW, vol. III, p. 422).

Dr. Warne sees an interaction of forces, and while he advocates shutting out the immigrant, as, perhaps, the disturbing element most easily controlled, he does a great service in emphasizing the power of the forces at work in the industrial system. The real objection to immigration, he says, does not lie in the fact that we are now getting Slavs and Italians instead of Irish and Germans—it is more than likely that the present evils would exist if the Slavs and Italians had come fifty years ago, and the English and Germans today—but in the changed conditions that have come about in the country itself, which dominate and control the tendencies that immigration manifests.

From the economic and impersonal side of immigration, we pass to the picturesque and personal in Dr. Roberts's *The New Immigration*. This book does not pretend to be a scientific treatise. It is rather a series of entertaining pictures of the immigrant as an individual, with his own peculiar characteristics and aspirations. He is shown to us in his own land, just starting out, then at the gate of the new world, then at his work, in his home, and in social relations. As a record of first-hand acquaintance with the immigrant, gained in a busy life of work with and for

him, these pictures are of great value in helping us to see the immigrant as a human being, as well as a "problem," and in helping us to feel, whatever we may think and do about restriction, that we have an important and fascinating work before us, in bringing these fellow-creatures who are now among us with all their varied needs and capacities for development and for service, into wholesome and harmonious relations with the social whole.

The Immigrant is a collection in book form of a series of syndicated news letters, and as such, is entirely popular in treatment. A large part of the book consists in brief summaries of the various reports of the Immigration Commission. The remainder offers such bits of history and observation as an active newspaper man is wont to put together for the entertainment and instruction of the general reader.

KATE HOLLADAY CLAGHORN.

New York School of Philanthropy.

The Malthusian Limit. By EDWARD ISAACSON. (London: Methuen and Company. 1912. Pp. xvii, 215. 3s. 6d.) Also published as *The New Morality. An Interpretation of Present Social and Economic Forces and Tendencies.* (New York: Moffat, Yard and Company. 1913. Pp. xv, 203. \$1.25.)

There can be no reasonable doubt that more attention should be given by English and American writers to the theory of a proper balance between population and resources—such a balance as in the long run, under tolerably settled and static conditions, would secure the finest unfolding of human capabilities and capacity for happiness in the population at large. A really great book might be written on the Malthusian limit, but Mr. Isaacson, failing to sense the great difficulty and intricacy of the problem, gives us merely a highly simplified and artificial mass of utopian speculation. The book before us is consequently a disappointment. Aside from his refusal to let existing static conceptions of morality and social organization stand in the way of his speculation, the author is commendable chiefly because he does see the inevitability of the population problem. His rejection of both socialism and individualism for a two class system—a fecund class in the country and a "surplus" class in (literally) childless cities, is mildly interesting, but insignificant. The serious reader may safely conclude that the book, while not without

points of suggestiveness, and here and there flashes of insight, may profitably be left untouched.

A. B. WOLFE.

Oberlin College.

NEW BOOKS

APPY, F. *L'accroissement de la population et sa loi. Part III of La vie de l'humanité.* (Paris: Giard et Brière. 4.50 fr.)

VON BEHR-PINNOW. *Geburtenrückgang und Bekämpfung der Säuglingssterblichkeit.* (Berlin: Springer. 1913. 2 m.)

FAIRCHILD, H. P. *Immigration. A world movement and its American significance.* (New York: Macmillan. 1913. Pp. 455. \$1.75.)
To be reviewed.

FLICK, L. F. *Eugenics.* Catholic summer school extension lectures. (Philadelphia: J. J. McVey. 1913. Pp. 39. 10c.)

GRIEPENTROG, E. *Ueber den Einfluss von Beruf und Lebensstellung auf die Todesursachen in Halle a.S. 1901-1909.* Beiträge zur Statistik der Stadt Halle a.S., 18. (Halle: Statistisches Amt. 1912. 1.50 m.)

KAPLUN-KOGEN, W. W. *Die Wanderbewegungen der Juden.* (Bonn: A. Marcus & E. Weber. 1913. 4 m.)

LEROY-BEAULIEU, P. *La question de la population.* (Paris: Alcan. 1913. Pp. iv, 512. 3.50 fr.)
To be reviewed.

MARCH, L. *La fertilité des mariages suivant la profession et situation sociale.* (Paris: Masson. 1913. Pp. 20.)

METHORST, H. W. *Nederlandsche Bevolkingsstatistiek.* (The Hague. 1913.)

Compares the vital statistics of Holland with those of other countries.

ROHLEDER, H. *Der Geburtenrückgang.* (Berlin: Fischer's Medicin. Buchh. 1913. Pp. 35. 1.20 m.)

ROFT, H. *Geburtenrückgang und Konfession.* (Cologne: J. B. Bachem. 1913. Pp. 96. 2.40 m.)

VILLARI, L. *Gli Stati Uniti d'America e l'emigrazione italiana.* (Milan: Fratelli Treves. 1912. Pp. 314. 3.50 l.)

Statistique démographique des grandes villes du monde. (Amsterdam: Bureau Municipal de Statistique. 1911.)

As the director points out in his preface to this publication, the statistical bureau at Amsterdam has long been publishing comparative vital statistics of 100 cities of the world, for a limited period of years, the last publication, No. 24, covering the years 1899-1907. In response to various requests the director now brings together the vital statistics for the chief cities of Europe for the entire period

1880-1909. The usefulness of the publication has been increased by including a list of the officials and the departments in each city from which information was secured. There is published, in addition, a valuable list of statistical publications of many of the cities from which the facts on vital statistics, as well as other statistical information, may be secured in detail.

The statistical data, 1880-1909, are classified in four tables as follows:

(1) Growth of population. This table states the annual population, the absolute numbers of births, deaths, and marriages, and the rates per 1,000 population. It states also the excess of births over deaths. In using this table for comparative purposes it is necessary to take note of the fact that no correction has been made for differences in age grouping in the various cities. In comparing different periods for the same city this will not be a serious source of error.

(2) Births according to legitimacy and sex. The table distinguishes between live-births, stillbirths, and total births, and computes the proportion of illegitimate births for each class. It divides births according to sex and computes the proportion of stillbirths for each sex, together with the relative number of female births per 100 male births, in each city for each year.

(3) Infant mortality. Both absolute numbers and rates are given. This table concludes with a valuable summary of the requirements in the various countries as to reporting births, especially stillbirths. Wide differences are shown to exist (pp. 162-164).

(4) Mortality according to certain specified causes. Both absolute numbers and rates per 100,000 population are given. The specific diseases reported are: scarlatina, croup and diphtheria, whooping cough, typhoid, pulmonary tuberculosis, cancer, and puerperal fever.

A second volume is promised covering the vital statistics of cities outside of Europe in a similar manner.

ROBERT EMMET CHADDOCK.

Zuigelingensterfte in Nederland in Verband met de Uitkomsten van het Haagsche Onderzoek 1908-1909. (The Hague. 1913. Pp. 20.)

Social Problems and Reforms

Constructive Rural Sociology. By JOHN M. GILLETTE. (New York: Sturgis and Walton Company. 1913. Pp. xii, 301. \$1.60.)

By assembling current propositions and pretty well known facts Professor Gillette tries to meet the need for a constructive treatment of rural problems, mainly sociological, and succeeds very well considering that the field is a new one. The book will be useful to the student needing an outline text covering many

topics, to the general reader desiring a brief summary of suggestions and theories for the analysis and reconstruction of rural society, and it will be helpful to all because of the precise bibliography following each chapter.

The author first sets forth the types of rural communities and then seeks for the rural problem which he discovers to be "in reality a product of the intellectual faculties" due to the general progress of the world rather than to any degeneration of rural life and society. He does not define or isolate the rural problem but discusses various pertinent facts and conditions. He then devotes four chapters to the betterment of the economic side of agriculture and farm life, such as the improvement of production, the business side of farming, transportation and communication; more than half the book to the improvement of rural health, socialization of country life, and the reform of institutions and charities; and closes with an appeal for rural social surveys as one of the helpful methods of betterment.

This book is a good beginning for a broad subject which needs further amplification and detailed treatment. The author apparently bases much of his discussion upon Western rural conditions and frequently either ignores or dismisses with a paragraph the regions east of the Alleghenies, and the South. Some special economic and social features of the North Atlantic Division are not recognized. For instance, while rented farms have increased in nearly all divisions of the country, in New England the owned farms have gained in per cent. In the South, tenant farmers have increased greatly, but the causes and significance of this movement are vastly different from those of the same movement in the North Central Division. Deductions from the general United States statistics on this matter are very liable to be inapplicable to selected regions. Much that is said about farm machinery and equipment would not well apply to New England. The discussion of the effects of isolation of farm life, etc., is quite true of the large farm areas of the West, but hardly applies to the present Eastern conditions as a whole.

In chapter 4, Professor Gillette gives mechanical invention as the fundamental cause of the drift of population to the cities, making social and cultural forces "incidental." Is not the desire for social life, physical and intellectual stimulation, broad range of vocations, and opportunity for honor, the real dynamic which causes the movement to the cities, while mechanical invention is

an instrument which enables these great natural forces to become active? Man loves to live in the midst of human affairs and mechanisms enable him to do so; they are a means, not a dynamic cause. The church, the neighborhood house, the Y. M. C. A., the grange, and other betterment organizations need treatment and alignment in accordance with some definite ideal of rural society in specified regions, and under given conditions. Such a treatment will give us further, constructive progress.

ROBERT J. SPRAGUE.

Massachusetts Agricultural College.

Economic Survey of Pittsburgh. By J. T. HOLDSWORTH. (Pittsburgh: City Council. 1912. Pp. 229.)

In 1909 when the Pittsburgh survey was completed, that newly fashioned instrument for city advance was not altogether popular in some quarters of Pittsburgh, but sentiment had evidently changed by 1911. The city council in the latter year gave both its backing and funds for another survey, authorized "to investigate the economic and other conditions of the city affecting its industrial and commercial prosperity," and to submit the findings together with recommendations for industrial and commercial advance. These findings and recommendations are the subject-matter of this volume.

The investigation followed twelve main lines, the subjects dealt with being: the smoke problem, workingmen's homes, food costs, rents, wages, unemployment, cost of living, food production and distribution, recreation facilities, municipal taxation and administration, uneconomical use of land and municipal efficiency and economy.

Excepting the data on rents, and the facts on food prices and wages, but little new material is presented. In the fairly typical chapter on unemployment, for instance, the bulk of the material represents chiefly a general discussion of the problem and long quotations from at least five published reports, only one of them giving facts on the local situation. Again, the main support of the conclusion that Pittsburgh needs workmen's houses renting from \$12 to \$25 is the quotation to that effect from the Chamber of Commerce Committee on Housing Conditions. In most cases this kind of support for the conclusions and recommendations is convincing as argument, and is valuable as a compilation of existing data, but is inadequate as proof.

Moreover, at two important points (important because of the

relation of housing and taxation to the city's industrial growth) the value of the material itself may be questioned. For instance, the data on rents are limited to individual descriptions and pictures of 44 Pittsburgh houses, ranging in assessed value for building and land from \$1400 to \$4200; 18 in Cleveland; 13 in Buffalo; 11 in Milwaukee; 8 in Detroit; 10 in Philadelphia; 7 in Newark; and 6 in Baltimore; and the facts are not tabulated so as to show general conditions, nor conclusions drawn from comparisons of individual houses in different cities. The procedure here followed would seem to have value only where the samples can be defended.

Again, in the matter of taxation, a table is presented showing sample assessments and actual city and county taxes paid by a number of manufacturing concerns in Detroit, Milwaukee, Newark, Buffalo and Cleveland; and comparing these with estimated taxes that these concerns would pay in Pittsburgh. The figures show lower taxes generally in Pittsburgh. These figures, however, are based upon estimated land values in Pittsburgh—a matter upon which the best appraisers frequently disagree—and these estimates do not bear any regular relation to the ratio between total land assessments in the various cities and in Pittsburgh. For example, the total land assessment in the city of Pittsburgh is over three times that in Newark and yet the land cost for one of these concerns, if located in Pittsburgh, is not estimated at one half more than in Newark. Stress is laid, furthermore, upon the exemption in Pittsburgh from the personal property tax, but no account is taken of the fact that, excepting Newark, Pittsburgh corporations pay a much higher proportion of state taxes than the cities in other states, since approximately three fourths (whereas figures for 1909 show the largest proportion in any other state, except New Jersey, to be less than one third of the total Pennsylvania revenue is derived from capital stock and other corporation taxes.

The point of view of the author is of constructive significance in placing emphasis upon the well-being of the workers of the city, and in forecasting the trend of thought on the tie between human and commercial values. There is a message for many a business man in the sentence: "This report is predicated upon the idea that a good city in which to live makes a good city in which to do business and that industrial and commercial progress is largely dependent upon social and civic conditions."

SHELBY M. HARRISON.

NEW BOOKS

BONNEVAY, L. *Les habitations à bon marché.* (Paris: Dunod & Pinat. 1912. Pp. 310. 3.50 m.)

BREIG, A. C. *Papal program of social reform.* (Milwaukee, Wis.: Diedrich-Schaefer. 1913. Pp. 70. 25c.)

COLLINS, E. A. *Leasehold enfranchisement. The case for and against a practical scheme.* (London: King. 1913. Pp. 117. 2s. 6d.)

CLOPPER, E. N. *Child labor in city streets.* (New York: Macmillan. 1912. Pp. vii, 280. \$1.25.)

This volume contains many important facts about that phase of child labor which is performed in the midst of great publicity but about which very little accurate study has been made. The author discusses the extent, effects, and remedies for the more common kinds of street work of children—messenger service, newspaper selling, boot blacking, delivery service, market work, and peddling. Long hours, bad moral surroundings, and lack of opportunity for promotion characterize practically all these industries. It is "blind alley" labor. The suggestion is made that in many cases, particularly newspaper selling and the messenger service, certain classes of adults could perform the work acceptably. Both England and Germany have enacted more restrictive legislation in connection with this class of labor than has either the United States or France. The book presents briefly and in a popular manner the claims of this hitherto almost neglected phase of child labor.

JAMES M. MOTLEY.

DEALEY, J. Q. *The family in its sociological aspects.* (Boston: Houghton Mifflin. 1912. Pp. 137. 75c.)

A very much simplified resumé of the history of the family, the evolution of state and church control over matrimonial institutions, and the ethical questions involved in the present economic and democratic influences which are putting the family through a process of reorganization. The point of view is that of evolutionary ethics, social utilitarianism, and rational liberalism. The book is written in a conventional style which deprives it of challenging, suggestive interest, but this defect will probably not be noticed by the type of general reader the author is evidently addressing. There is a place for more books with this design—to appeal to the general, relatively uninformed reader, in a simple but rational and relatively scientific discussion of the social and ethical aspects of many institutions, some of which have too long been considered above scientific investigation.

A. B. WOLFE.

DUFFY, F. *Industrial education and the labor unions.* (New York: Teachers College, Columbia University. 1913. Pp. 14. 10c.)

FISCHER, A. *Grundriss der sozialen hygiene, für mediziner, national-ökonomien, verwaltungsbeamte und sozialreformer.* (Berlin: Springer. 1913. Pp. viii, 448, illus. 14 m.)

- HAYES, C. H. *British social politics; materials illustrating contemporary state action for the solution of social problems.* (Boston: Ginn. 1913. Pp. xi, 580. \$1.75.)
- HOWE, F. C. *European cities at work.* (New York: Scribner. 1913.)
Treats of town-planning and city-building; socializing the means of transit; housing the people; the possibility of taxation as an agency for social welfare; municipal ownership; caring for the working people; and other activities which have been worked out during recent years.
- HOWERTH, I. W. *Work and life; a study of the social problems of today.* (New York: Sturgis & Walton. 1913. Pp. 278. \$1.50.)
Social legislation backed by enlightened public opinion must so control our economic institutions that the benefits may be more justly shared by all the members of society.
- KNEELAND, G. J. *Commercialized prostitution in New York City.* Publications of the Bureau of Social Hygiene. (New York: Century Co. 1913. Pp. 334. \$1.30.)
- LEDERER, E. *Jahrbuch der sozialen Bewegung in Deutschland und Oesterreich 1912.* (Tübingen: Mohr. 1913. 4 m.)
- MOTLEY, J. M. *Housing rehabilitation.* (New York: Survey Associates, Inc. 1913. Pp. 63.)
A reprint of part IV of San Francisco relief survey.
- NAVILLE, F. A. *Les maisons insalubres.* (Geneva: P. Richter. 1913.)
- RAUHE, C. *Die unehelichen Geburten als Sozialphänomen. Ein Beitrag zur Bevölkerungsstatistik Preussens.* Statistische und nationalökonomische Abhandlungen, 8. (Munich: Reinhardt. 1912. Pp. 94. 4 m.)
- ROWNTREE, B. S. *How the labourer lives.* (London: Nelson. 1913.)
- SIMS, N. L. *A Hoosier village.* (New York: Longmans. 1912. Pp. 181. \$1.50.)
- TESTAFERRATA, G. O. M. *La questione delle classi medie.* (Florence: Libr. Ed. Fiorentina. 1912. Pp. viii, 220. 4.50 fr.)
- DE VUYST, P. *Woman's place in rural economy.* Translated from the French. (London: Blackie. 1913. 3s. 6d.)
- WALLACE, A. R. *Social environment and moral progress.* (New York: Cassell & Co. 1913. Pp. viii, 163.)
- WARD, E. J. *The social center.* (New York: D. Appleton. 1913. Pp. x, 359. \$1.50.)

Report of proceedings. The second quadrennial council of the Federal Council of Churches of Christ in America. (New York: National Offices, 215 Fourth Ave. 1913. Pp. 140.)

Proceedings of the national conference of charities and correction at the thirty-ninth annual session. (Fort Wayne, Ind.: Fort Wayne Printing Co. 1912. Pp. 644.)

Rapport du conseil supérieur des habitations à bon marché. (Paris: Berger-Levrault. 1913. Pp. 91. 1 fr.)

Verschiebungen im Mietaufwand für grossere Wohnungen 1905-10. Beiträge zur Statistik der Stadt Mannheim, No. 29. (Mannheim: Franz Eyer. 1912. Pp. 64.)

Insurance and Pensions

Medical Benefit in Germany and Denmark. By I. G. GIBBON.
(New York: E. P. Dutton and Company. 1913. Pp. xv, 296. \$2.00.)

Mr. Gibbon's book is of a new kind. It is not written to argue the general desirability of a system of sickness insurance, nor is it merely a description or laudation of existing systems. Assuming that some sort of insurance is in question, it asks, "What sort is best?" Germany's three decades of experience with compulsory insurance, and Denmark's two decades with voluntary, supply the main basis of the book's argument. The contrast is often great. Mr. Gibbon studies it first in the provisions of the law, then in the actual working of the law, and finally he states his inferences in the form of propositions. In this procedure much must depend on the study of experience. We cannot always be sure that this study is really ample. "The doctors prefer," we are told, this or that. How generally they so prefer we may not be told; references are often essentially illustrative. A series of appendices meet a part of these *lacunae*; for the rest we recall that German and Danish experts have read the manuscript and we like the general tone of frankness and thoroughness which the book has.

Chapters deal with the choice and remuneration of medical practitioners, the control of the medical service, medical and surgical requirements, and with institutional benefit and related matters. Insurance questions not closely associated with medical benefit are by intention omitted. Upon medical benefit, however, Mr. Gibbon's conclusions are explicit. That societies (or their federations) should deal directly with doctors (or their associations) he recommends. There should be free choice of doctor. Higher rates of remuneration for doctors will probably be necessary—continuing a movement already under way—to make up for their more exclusive concern with the working classes. Payments should be in the form of capitation fees. Detailed control of doctors should be through their own organizations. Their

treatment must be supplemented by institutional aid. These are a few of the stated conclusions of the book.

Faith in organization—organization by workmen, organization by doctors—might be called the keynote of Mr. Gibbon's study. The final chapter becomes even more insistent upon organization. The reviewer is not convinced that the degree of organization approved by the author will really allow escape from the evils of general public management described in an earlier chapter (3). Deadlocks are possible. We read, of Germany:

The doctors are too well organized and too well practised in agitation during the past troublesome years to be ignored. If they put their threat into effect, they will fight with good prospects, provided that they close their ranks firmly. Unless some compromise can be effected there are probably stormy times ahead (ch. 7, p. 66).

Compromise may fail; the insurance law must be enforced; the sovereign state will logically end the dispute. From such a precedent there will almost surely be derived in time abundant details of regulation and administration. We do not yet clearly see how far an institution that is publicly devised can be privately managed.

Mr. Gibbon's book must be judged for its services in discussing the value of the specific provisions of insurance measures. Its thought is at once careful and resolute. It supplies a much needed supplement for the books, hitherto chiefly conspicuous, that merely describe systems without comparison and valuation of their parts. It should prove the more useful for being compact, clearly written, and conveniently arranged.

ROBERT F. FOERSTER.

Harvard University.

L'Assurance contre le Chômage à l'Etranger et en France. By J. LEFORT. Two volumes. (Paris: Fontemoing et Cie. 1913. Pp. ix, 410; 290.)

Lefort is known as the author of sundry books on insurance against death, strikes, and old age. His most recent work, on employment, follows the plan of his chief earlier work, on old age. In one volume, after a review of the causes of unemployment and an analysis of the peculiar difficulties of unemployment insurance, are examined critically the systems of unemployment insurance that have arisen in eighteen foreign countries. Probably this is the most elaborate account of these systems published

in French. Switzerland and Germany are amply treated. Belgium and her imitators Denmark and Norway (really the first countries to have national schemes) are, for no clear reason, dealt with on a smaller scale. England seems slighted; her compulsory act, though it had not gone into force when Lefort's book was written, is more bold and radical than any other, and deserves careful analysis. Generally the information utilized is commendably recent. The abundant authorities cited are almost all French. It is extraordinary to discover no reference whatever to the invaluable comprehensive report published by the German statistical office. The notable English writings are also absent; references for English authority are to subordinate works.

The second volume is a study, probably the best to be found, of French provision. In turn are described the organization and operations of the private insurance companies, the mutual aid societies, the employers' funds, the independent trade-union funds (one hundred pages are for these), and the subsidized trade-union funds. The respective merits of mutual and compulsory insurance are studied; only casual attention is given to the effects of insurance schemes.

Much of the second volume discusses, with unfavorable result, the practicability of a compulsory insurance system. Compulsion could not properly apply to all occupations; the good risks would support the bad—why should they? The personal factor in unemployment is hard to detect; compulsion is desired neither by employers (who would have to contribute) nor by workmen; employers would shift their burden to prices whose high level is already attributed generally to social legislation. Perhaps the judicious quality of the book lapses here! Extension of industrial education, of voluntary insurance and of employment bureaus is needed. "It must be recognized that the institution of compulsion would be premature because of the lack of sufficient statistics, the defective system of employment exchanges, the absence of vigilance due to the imperfections of the trade union organization."

ROBERT F. FOERSTER.

Harvard University.

NEW BOOKS

AGNEL, E. *Manuel général des assurances ou guide pratique des assureurs et assurés.* Fifth edition, revised and brought down to date by C. DE CORNY and G. DUJON. (Paris: Marchal & Godde. 1913. 10 fr.)

BOYD, J. H. *A treatise on the law of compensation for injuries to workmen under modern industrial statutes.* (Indianapolis: Bobbs-Merrill. 1913. Pp. xxvii, 1622. \$7.50.)

CORMAUX, E. *La solution du problème des assurances sociales en Belgique. Rapport présenté au congrès de la ligue démocratique belge, tenu à Namur les 22 et 23 septembre 1912.* (Liège: D. Cormaux. 1912. Pp. 54. 0.50 m.)

DOBSON, G., translator. *Company fire insurance in Russia, 1827-1910.* (St. Petersburg: Tariff Commission of Russian Insurance Companies. 1913. Pp. 145.)

FOLLMANN, J. *Invaliden- und Hinterbliebenenversicherung.* (Berlin: Guttentag. 1913. Pp. 528.)

FRENCH, E. V. *Factory mutual insurance.* (Boston: The Arkwright Mutual Fire Ins. Co. 1912. Pp. 123.)

In the notice of this book printed in March, 1913 (vol. III, p. 176), there were two errors which should be corrected. The date of organization was 1860 instead of 1835. The percentage of return premium is 84 instead of 48, an unfortunate reversal of figures.

W. F. G.

LEIBL, K. *Das Recht der Versicherungsunternehmen.* Sammlung Götschen, 635. (Leipzig: G. J. Götschen. 1913. Pp. 157. 0.90 m.)

LOTT, E. S. *Cost of employers' liability and workmen's compensation insurance. Which will be best for the workman? etc. Workmen's compensation laws as distinguished from employers' liability laws.* (New York: The author, 141 Broadway. 1913. Pp. 6; 158; 12. Gratis.)

MAGALDI, V. *Le assicurazione popolari nei riguardi del monopolio delle assicurazioni vita in Italia.* (Rome: Bertero. 1912.)

MANES, A. *Versicherungslexikon. Ergänzungsband für die Jahre 1908 bis 1912.* (Tübingen: Mohr. 1913. Pp. 982. 16 m.)

ORRIS, W. G. *The national health insurance act. An alternative scheme.* (London: King. 1913. 6d.)

ROSENHAMER. *Die Unfallversicherung bei Bauten in der Reichsversicherungsordnung.* (Munich: E. Rentsch. 1912. Pp. 416.)

SOERGEL, T. *Jahrbuch des Reichsversicherungsrechts. Jahrgang 1912.* (Stuttgart: Kohlhammer. 1913. Pp. viii, 175. 3 m.)

————— *Report of commissioners of customs and excise for 1911-1912.* Cd. 6462. (London: Wyman. 1912.)

Contains statistical information relating to old-age pensions.

————— *Allgemeine Seeversicherungs-Bedingungen von 1867.* (Hamburg: L. Friederichsen & Co. 1913. Pp. 90. 1 m.)

Pauperism and Charities

Die sozialökonomischen Grundlagen der englischen Armenpolitik im ersten Drittel des 19. Jahrhundert. By JESSIE MARBURG. (Karlsruhe: G. Braun'sche Hofbuchdruckerei und Verlag. 1912. Pp. 120. 2.40 m.)

Dr. Marburg confines attention to "the historical development of the principles of public poor relief in unity with economic theory and social views of a limited period," the first third of the nineteenth century. First, is reviewed certain earlier circumstances directly related to these later developments. The indefiniteness of legislation and consequent looseness of administration, the mercantilist theory of poverty, the doctrine of an abstract right to relief, the widespread acceptance of that doctrine in theory and in practice, and the attack on it by the classical economists, are all interestingly discussed. With the last topic the main subject is reached.

While all the cardinal doctrines of the classical school worked powerfully against any notion of abstract rights to relief, the Malthusian theory of population was particularly effective, because it was an induction from the economic and social conditions of the time. "The entire development of the twenty years seemed like an ocular demonstration of the Malthusian theory." The predominance of this philosophy, added to the pressure of taxation, led to a strong demand for the entire abolition of all systems of public support. The abandonment of this extreme position was as rapid as its rise. By 1830, effort was centered on a movement for positive reform. Certain parishes had introduced successful reorganization, thus pointing the way to reform and proving its efficiency. In addition, "it was a practical denial of the theory of overpopulation, and of the wage-fund theory." Legislators, mistrustful of the validity of accepted doctrines, turned to a consideration of actual conditions, and thus there was developed "an independent theory of poor relief which became the basis of reform." This new view was "based on the social responsibility of the community" for the advance of civilization. "A rational system of poor relief worked against overpopulation" by preventing hopeless poverty. Wages depended "on the grade of productivity of the laborer."

In developing his thesis the author has drawn copiously on the literature of the period. In the main his conclusions are well supported. That which is most likely to be questioned is his

interpretation of the theoretic basis of the great reform movement of the thirties. To many that movement is characterized by far-reaching modifications of the doctrines of the classical school, but not by an abandonment of their essentials. The "social responsibility of the community" was negative rather than positive, and was intended to prevent degeneracy rather than to promote advancement. Reform of the poor laws would result in social progress by increasing individual responsibility, not by decreasing it. Productivity affected *directly* the wages fund, not wages. Self-help was still regarded as fundamental. In theory, rigid individualism was still supreme.

It seems strange that such a comprehensive analysis of the views of this period should take no account of the doctrine of utilitarianism, which, by requiring that all theories be submitted to the test of actual conditions, influenced profoundly the viewpoint of the time. Nevertheless, Dr. Marburg's monograph is an able review of an interesting period in England's social development. Its style is clear, concise, and logical.

A. B. BALCOM.

University of Minnesota.

NEW BOOKS

CROS-MAYREVIELLE, G. *Traité de l'assistance hospitalière*. Three volumes. (Paris: Berger-Levrault. 1913. Pp. 1829, illus. 36 fr.)

FOSSEYEUX, M. *Les grands travaux hospitaliers à Paris au dix-neuvième siècle*. (Paris: Berger-Levrault. 1913. Pp. 46. 1.50 fr.)

HILLS, J. W. and WOODS, M. *Poor law reform. A practical programme. The scheme of the Unionist social reform committee*. (London: King. 1913. Pp. 64. 1s.)

WEBER, A. *Les miséreux. Troisième partie: Essai sur le problème de la misère, l'aide sociale au nécessiteux adultes valides*. (Paris: Rivière. 1913. Pp. xi, 493. 5 m.)

San Francisco relief survey. (New York: Survey Associates, Inc. 1913. Pp. 510. \$3.50.)

Socialism and Co-operative Enterprises

Socialism and Democracy in Europe. By SAMUEL P. ORTH. (New York: Henry Holt and Company. 1913. Pp. iv, 352. \$1.50.)

Applied Socialism. A Study of the Application of Socialistic

Principles to the State. By JOHN SPARGO. (New York: B. W. Huebsch. 1912. Pp. 333. \$1.50.)

Illusions Socialistes et Réalités Economiques. By DANIEL BELLET. (Paris: Marcel Rivière et Cie. 1912. Pp. 198. 3 fr.)

Dr. Orth has provided the general reader with a compact and well-balanced description of the contemporary socialist movement in France, Belgium, Germany, and the United Kingdom. In the case of each country the main tendencies of both the political and the economic phases of the movement are analysed, and a sympathetic appraisal is made of the contribution of socialism to the progress of the nation. Everywhere the author finds socialism merging into social democracy, losing its exclusive class character and its revolutionary tactics. These descriptive chapters are prefaced by a somewhat less satisfactory general section, giving an historical survey of socialism and an analysis of its principles. The scientific socialist will hardly subscribe to such a statement of his creed, for instance, as is given on page 11:

The three theories that underlie socialism permit the hope of the possibility of a social regeneration. These theories are, first, that God made the world good, hence all you need to do is to revert to the pristine goodness and the world is reformed. Second, that society is what it is through evolution. If this is true, then it is only necessary to control by environment the factors of evolution and the product will be preordained. Third, that even if man is bad and has permitted pernicious institutions like private property to exist, he can remake society by a bold effort, i.e., by revolution, because all social power is vested in man and he can do as he likes.

The interest of the book is increased by the author's command of a fresh, vivid style, though lapses such as "the resistless current," "the unctuous doctrines of socialism," are too frequent. Very useful appendices contain translations of the most important party programs and election manifestos.

Mr. Spargo's work, which contains the substance of a series of lectures delivered at the Rand School of Social Science, New York, adds one more to the many attempts made of late to forecast the working of the socialist state. It deals with the main topics familiar in Kautsky, Vandervelde, Deslinières, Renard, Menger, Hillquit, and others—the unit of administration, the extent of private property, the organization and payment of labor, the incentive to effort, the status of the family, the future of religion. While not striking many original notes, the book

affords a comprehensive, lucid and frank treatment of the whole question.

In the main the author is a thoroughgoing evolutionist: the socialist institutions of the future are not to be deduced from abstract socialist principles, but evolved from existing capitalistic devices. The state, the wage system, differences in wages, money, these and many other features of the existing order, once scorned, are retained, at least in form, until the difference between this opportunist socialist program and the policy of an advanced liberal becomes largely one of emphasis. A typical instance of Mr. Spargo's attitude and of the difficulties in which he becomes involved is afforded by his treatment of the industrial organization of the socialist state. Following Kautsky, he makes the state the dominant unit of production, but permits coöperative societies and individuals to work alongside. Thus freedom is saved, but at the loss of the efficiency, based on centralized control, promised by socialists who denounce the free competition and wasteful duplication of effort of existing society. At the same time, no reason is apparent for the exclusion from a state which is to evolve gradually from the present state, of production by individuals employing other workers, on terms as to hours, wages, and so forth equivalent to those afforded by the state, unless the reason is a natural unwillingness to abandon the orthodox position that exploitation is inherent in the wage relation. Little comfort is given the syndicalist, or even the more modest advocate of labor unionism; not only are the claims of the labor union to become the unit of administration and of election of officials rejected, but repressive measures are foreshadowed:

We can hardly escape the conclusion that the attitude which the labor unions of today very properly take in industrial conflicts would not be tolerated if adopted against the State. In self-protection the State would be obliged to treat as treasonable, acts which are perfectly proper and justifiable when directed against individual or corporate employers.

Evidently the Haywoods and the Ettors of the future socialist state will still have a mission.

Mr. Spargo carries the war into Africa by charging the existing state with excess of bureaucracy and consequent loss of freedom, in its endeavor to regulate corporate wealth. He has also a good chapter on the incentive to effort under socialism, though attention, as usual, is concentrated too exclusively on the genius burning to deliver his message whatever the cost, and not suffi-

ciently on the average man with little primary interest in his task. A chapter emphasizing the neutral position of socialism as regards religion completes a readable and well-rounded treatment.

Dr. Orth, a sympathetic critic of socialism, and M. Bellet, a sharply hostile critic, agree in terming socialistic every intervention of the state beyond the administration of justice. "Whatever extends the functions of the state over property or into activities formerly left to individuals or to the home is an indication of the socialist trend," declares the former, and the professor of L'Ecole Libre des Sciences Politiques includes under the head of socialist illusions practically every recent tendency of labor legislation. Surely it is possible to discriminate between state intervention which really buttresses private property and intervention which saps its supports. However that may be, M. Bellet's criticisms are well worth weighing. He will probably not find many Americans to agree with his rigidly laissez-faire position, but his book will prove a healthy tonic for flabby sentimentalism and uncritical acceptance of popular fads. In the first part he reviews the experience of the leading countries in arbitration of labor disputes, condemning strongly the proposal to introduce compulsory arbitration in France. The second part contains an incisive analysis of profit sharing, the premium system, sliding scales, and other modifications of the wage system, leading to the conclusion that the straight wage system is the most permanently satisfactory. The third section reviews the Australasian experiments in "state socialism." While there is some lack of detailed and first-hand information, the criticisms are pertinent and forceful.

O. D. SKELTON.

Queen's University, Kingston, Canada.

NEW BOOKS

- ADAMS, E. F. *The case against socialism.* (San Francisco: Paul Elder & Co. 1913.)
- BENSON, A. L. *The truth about socialism.* (New York: Huebsch. 1913. Pp. 188. \$1.)
- BREWER, G. D. *The rights of the masses.* (Chicago: Kerr. 1913. Pp. 32. 10c.)
- CREEL, H. G. *Fact and fraud; a lecture making socialism plain.* (St. Louis: National Rip-Saw Pub. Co. 1913. Pp. 40. 10c.)
- FAY, C. R. *Copartnership in industry.* Cambridge manuals of science and literature. (New York: Putnam. 1913. Pp. 154.)

- JANDUS, W. *Social wrongs and state responsibilities*. (Cleveland: O. H. Carr. 1913. Pp. 143. \$1.50.)
- JARRETT, B. *Mediaeval socialism*. (London: Jack. 1913. 6d.)
- JOHNS, A. R. *Socialism; its strength, weakness, problems and future*. (New York: Eaton & Mains. 1913. Pp. 75. 50c.)
- MARRIOTT, J. A. R., editor. *The French Revolution of 1848 in its economic aspect*. Vol. I. Louis Blanc's "*L'organisation du travail*." Vol. II. Emile Thomas' "*L'histoire des ateliers nationaux*." (Oxford: Clarendon Press. 1913. Pp. xcvi, 284; 395.)
- PRAGIER, A. *Die Produktivgenossenschaften der schweizerischen Arbeiter*. (Zurich: Rascher & Co. 1913. Pp. 161. 5 m.)
- ROBERTS, E. *Monarchical socialism in Germany*. (New York: Scribner. 1913. \$1.25.)
- Treats of unemployment insurance, railroad regulation and rebates, goodwill toward trusts, labor exchanges, the elimination of the unskilled, the difference between state socialism and the so-called "red socialism," and the relation of the German emperor to these reforms.
- RUBIN, J. *Socialist enemies of socialism*. (New York: "The Light" Pub. Co. 1903. Pp. 32. 20c.)
- SAMUELSON, B. *Socialism rejected*. (London: Smith, Elder & Co. 1913. 7s. 6d.)
- DE SEILHAC, L. *Une expérience socialiste*. (Paris: Rousseau. 1913.)
- SIMKOVITCH, V. G. *Marxism versus socialism*. (New York: Holt. 1913. Pp. xvi, 298. \$1.50.)
- SNOWDEN, P. *Socialism and syndicalism*. (London: Collins. 1913. Pp. 262. 1s.)
- WALLING, W. E. *The larger aspects of socialism*. (New York: Macmillan. 1913. Pp. xxi, 406. \$1.50.)
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- Year book of international coöperation. (London. King. 4s.)

Statistics and Its Methods

- Einführung in die Statistik*. By ERNST MUELLER. Leipzig: Duncker und Humblot. 1912. Pp. viii, 46. 1.50 m.)
- La Statistique*. By ANDRE LIESSE. Second edition. (Paris: Librairie Félix Alcan. 1912. Pp. viii, 192. 2.50 fr.)

The little book by Dr. Müller of the University of Munich was written primarily to afford some general knowledge of statistics to students in German universities and commercial high schools who have no specialized interest in the subject. Except for some introductory pages devoted in characteristically German fashion

to an abstract, conventional, and necessarily futile exposition of the place of statistics as a "*selbständige Wissenschaft*," the treatment is mainly concerned with the methods and functions of official statistics, with special reference to German-speaking countries. There is also a short account of some of the elementary and non-mathematical methods of statistical analysis. The book is lucidly and interestingly written and may be commended to the American student who wishes some knowledge of the organization, methods, and scientific spirit of official statistical work in Germany and of the somewhat complex scheme of German official statistical publications.

The new edition of Professor Liesse's treatise differs but little from the first edition, which was published in 1905. An appendix of 10 pages, giving a cursory treatment of the use of statistics in banking, railway transportation, and insurance has been added, and there are a few minor changes. The book remains a pleasantly written but rather discursive treatment of elementary statistical methods, with special emphasis upon the various sorts of fallacies to which the misuse of statistics may lead. Its point of view is somewhat provincial: it smacks distinctly of the flavor of the discussions of the Société de Statistique. On the whole it is a book which one can safely afford to neglect.

ALLYN A. YOUNG.

Cornell University.

NEW BOOKS

ARONOVICI, C. *Knowing one's own community. Suggestions for social surveys of small cities or towns.* Second edition, revised and enlarged. Social service series, Bulletin No. 20. (Boston: Am. Unitarian Assoc. 1913. Pp. 82.)

GINI, C. *Variabilità e mutabilità.* (Bologna: Paolo Cuppini. 1912. Pp. 158.)

To be reviewed.

GLUTSKY, E. E. *Theory of correlation and frequency curves.* In Russian. (Kiev: 1912. Pp. 208. 1 rouble, 25 kopecks.)

HALBWACHS, M. *La théorie de l'homme moyen.* (Paris: Alcan. 1913. Pp. 180. 2.50 fr.)

HARTLEBEN, A. *Kleines statistisches Taschenbuch über alle Länder der Erde. 20 Jahrgang.* 1913. (Vienna: A. Hartleben. 1913. Pp. iv, 116. 1.50 m.)

HOLT, E. E. *Physical economics—with reference to the economic*

value of man. (New Bedford, Mass.: Mercury Pub. 1913. Pp. 35.)

JAECKEL, R. *Statistik und Verwaltung mit besonderer Berücksichtigung der preussischen Verwaltungsreform.* (Jena: Fischer. 1913. Pp. ix, 62. 2 m.)

KAUFMANN, A. *Theorie und Methoden der Statistik.* (Tübingen: Mohr. 1913. Pp. xii, 540. 16 m.)
To be reviewed.

KOWATSCH, A. *Illustrierte deutsche Statistik. Diagramme und Stufenkarten.* (Berlin: Puttkammer & Mühlbrecht. 1912. Pp. xxviii, 140. 7.50 m.)

VON MAYR, G. *Moralstatistik.* (Tübingen: Mohr. 1913. Pp. 82.)
A section of *Statistik und Gesellschaftslehre* dealing with statistics of crime.

MENDELSON, M. *Die Entwicklungsrichtungen der deutschen Volkswirtschaft nach den Ergebnissen der deutschen Statistik.* (Leipzig: Deichert. 1913. 1.50 m.)

SIMVEL, R. *Statistische Uebersichten zur Wirtschafts- und Verkehrskunde.* (Vienna: Hölder. 1912. Pp. 143.)

THOMANN, H. and FELD, W. *Die Familienstatistik der Stadt Zürich. Statistik der Stadt Zürich, 12.* (Zurich: Rascher. 1912. Pp. iv, 40. 0.80 m.)

THORNDIKE, E. L. *An introduction to the theory of mental and social measurements.* (New York: Teachers College, Columbia University. 1913. Pp. xi, 277. \$2.50.)

ZAHNBRECHER, F. X. *Lohnstatistik.* (Nuremberg: J. L. Schrag. 1913. 2.50 m.)

Final report on the first census of production of the United Kingdom (1907) with tables and index. (London: King. 1913. 7s. 6d.)

Le traitement statistique des mesures mentales. (Paris. Alcan. 1912. Pp. 50.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

The Sugar Industry by F. J. Sheridan (United States Bureau of Foreign and Domestic Commerce, Miscellaneous Series, No. 9, Washington, 1913, pp. vii, 127) is mainly a compilation of data relating to agricultural and manufacturing costs and conditions of producing cane sugar in Louisiana, secured under the general direction of the Tariff Board in 1912 and covering the crops of 1909, 1910, and 1911.

For the agricultural year of 1911 and the manufacturing season of 1911-12, data are selected from 15 of the 23 parishes which produce 97 per cent of the total cane tonnage of the state. Detailed cost figures are taken from the records of companies operating 56 plantations and 23 factories in these parishes. The plantation costs include the cane tonnage from 49,723 acres, which is about one seventh of the total for the state. The factory costs are for about one fourth of the total amount of cane crushed. The statistics for 1910 and 1909 are about two thirds and one half as comprehensive, respectively, as those for 1911. In the cases of the larger plantations and factories, excellent daily records and cost-accounting systems enabled the securing of unusually accurate data.

In addition to the direct cost statistics, the report gives many factors and conditions of Louisiana cane sugar production as, for example, facts relating to restorative crops, fertilizers, drainage, tenant systems, labor conditions, contracts, equipment, systems of delivery and transportation, processes of manufacture, etc.

The latter part of the report is in the nature of an appendix which gives miscellaneous statistics from standard authorities relative to the American and European beet-sugar industries and regarding both beet and cane-sugar production, consumption, imports, exports, and customs receipts in the various countries of the world. Much of the data in this part are not later than for 1909.

The probability of early freezes in Louisiana necessitates harvesting cane before it is mature and a smaller percentage of sugar is obtained than in the more favored fields of Cuba, Hawaii, Java, and other tropical islands. During the past two or three years, very severe early freezes and extensive floods have injured the Louisiana industry in an unusual degree. Hence the report, in so far as it covers this period, shows abnormally high costs and low profits, even losses in some cases. On the other hand, much of the data seems to be taken from the larger and more efficiently managed plantations

and factories and the general impression given of the industry as a whole is that it is upon a more scientific basis than is usually thought to be the case.

The point of view of the report is not essentially different from that of other reports of the recent Tariff Board, that is, protectionist, but on the whole, this compilation of data is probably the most systematic, comprehensive, and reliable that has been published relative to sugar costs in Louisiana and it indicates that much of the industry of that state is very near the margin, even under average conditions.

Cornell University.

ROY G. BLAKEY.

The New York agricultural experiment station has recently published a bulletin, *The Financial Stimulus in City Milk Distribution*, by H. A. Harding and J. D. Brew (Geneva, N. Y., April, 1918, pp. 165-178) in which ingenious estimates are made in regard to the cost of producing milk. Detailed estimates in regard to the capital invested in supplying milk to a city of 13,000 inhabitants are assembled as follows:

Cows	600, at \$80.....	\$48,000
Lands with buildings, 3000 acres, at \$100....	300,000	
Equipment.....	3000 " " 20....	60,000
City distributors		50,000
Total		\$458,000

This estimate amounts to a little over \$36 per capita of the people supplied with milk. From the agricultural standpoint the capitalization amounts to \$763 per cow, of which the producer furnishes \$680 and the retailer \$83. Costs of distributing are further considered, based upon estimates by one of the large Boston retailers.

Bulletin 231 of the agricultural experiment station of the University of Wisconsin, on *The Marketing of Wisconsin Cheese*, prepared by H. C. Taylor, W. A. Schoenfeld, and G. S. Wehrwein (Madison, April, 1913, pp. 46) is not only a comprehensive study of an important industry in which Wisconsin is rapidly taking a leading position, but furnishes an important contribution to the possibilities of coöperation as applied to agriculture. It is hoped that similar studies will be made of other agricultural products. The bulletin is illustrated with diagrams, maps, and charts showing the location of production, the location of selling boards, warehouses, cold storage plants, shipments, and primary markets, etc. for all the United States.

Students of economic products and history, who wish to use the

library of the American Society of Municipal Engineers of New York, will find serviceable a check *List of Periodical Sets* which are to be found in the joint libraries of engineering societies (29 West 39th St., New York, pp. 55).

"The Market World and Chronicle" (20 Wall St., New York) has issued a translation of the *Constitution, By-Laws, and Clearing-House Rules of the Bremen Association for Futures Business in Cotton* (March 29, 1913, pp. 14).

The *Report of the Directors of the Port of Boston for 1912* is the initial account of the plans and undertakings of this public service board established in 1911. In the appendix is a memorandum on terminals, sources of traffic, differentials, and Boston's foreign commerce (Boston, 1913, pp. 78). In a separate document is a *Report of Joseph A. Conry; Inspection of European Ports, 1912* (Boston, 1913, pp. 28). Mr. Conry is one of the directors of the port.

Corporations

The report of the Bureau of Corporations on *The International Harvester Company* (Washington, Department of Commerce and Labor, Bureau of Corporations, March 3, 1913, pp. xxiii, 384) contains the usual summary, and is then divided into seven chapters dealing with the following points: conditions before formation; organization of the company; capitalization compared with investment in 1902; subsequent development of the company; profits and prices; productive efficiency and financial resources; competitive methods.

The bureau considers that the primary cause of the formation of the Harvester combine was severe competition. But as the combined profits of the companies' five constituent members from 1898 to 1902 were \$43,000,000 (an average of about \$8,600,000 a year), the bureau does not believe this competition to have been by any means destructive (pp. 2 ff.). The original capitalization of the concern was \$60,000,000, or nearly \$11,000,000 more than the bureau's estimate of the value of the physical property. The bureau considers, however, that if good-will is assumed to have had something approaching its computed value, this deficiency in tangible property was fully made up (p. 133).

Among the most important conclusions of the report are those relative to productive efficiency. The average cost of production per unit on the majority of machines in the International plants is much lower than the average in independent plants, due to the International's large volume of output. It is to be noted, however, that the

proportion of selling expense for the combination on harvesting machines (the only line in which adequate comparison of selling expense can be made) is greater than for the independents (pp. 260 ff. and 275 ff.). This is due, according to the bureau, to the International's elaborate selling organization.

One of the greatest elements of strength in the combination is its enormous financial resources, giving it three tremendous advantages: (1) securing fullest benefits of large scale production; (2) carrying full lines and maintaining an elaborate sales organization; (3) granting extremely long terms of credit.

In discussing competitive methods, the bureau repeats the oft reiterated assertion that methods fair in the case of several competing concerns of reasonably equal strength, may cease to be fair when one concern is so dominant as the International. The chief competitive methods of the Harvester combine have been: bogus independents; full-line forcing, so allotting brands as to secure an undue proportion of dealers; forcing exclusive handling; suggested retail price lists; discriminating prices and terms; misrepresentation of competitors (p. 290).

The attempted comparison contained in this report of the efficiency of the International and of the independents suggests a line of inquiry that, in the estimation of the writer, is most important. Why should not the same thing be attempted in the case of every trust? If the economies of combination are real they ought to appear in dollars and cents, and the fallacy of "trust busting" be demonstrated once and for all. If trust economies are chiefly those of large scale production, as appears to be the case with the Harvester combine, then advocates of dissolution will have a sound basis for their contention, and the government a good reason to continue the policy of breaking up combinations.

WILLIAM S. STEVENS.

The Commissioner of Corporations has recently issued part IV of the report on transportation by water in the United States, specifically devoted to *Control of Water Carriers by Railroads and by Shipping Consolidations* (Washington, 1913, pp. xvii, 101).

Regular lines on the Lakes are in the hands of the railroads, being in the main western extensions of the eastern lines ending at Buffalo. These lines maintain water-and-rail rates at a mild, fixed differential under the all-rail rates. Coastwise lines south of New York and Boston excepting the Merchants and Miners Transportation Co., controlled by the New Haven Railroad, are controlled (a) by the Atlantic, Gulf, and West Indies, the coastwise combine, or (b) they are north-

ern extensions of southern railroads terminating at Gulf or South Atlantic ports. Long Island Sound lines are controlled by the New Haven Railroad. Lines north of New York and Boston, including Boston-New York, are united under the name of the Eastern Steamship Corporation.

In the course of the last seven years a consolidation of water carriers engaged in the American inland and coastwise trade has been quietly completed. This volume, read in connection with the *Hearings on the So-called Shipping Combine before the House Committee on Merchant Marine and Fisheries* (H. Res. 587), ought to relieve any reader of the ancient superstition that the water is free and no combination of carriers upon it can be formed. The roadbed is free, but suitable terminals are not; nor is equipment suitable for package freight or passengers to be "chartered in the open market"; nor are traffic arrangements with connecting carriers attainable for a new line on a moment's notice; nor is a traffic organization inland, and prestige among inland shippers, to be created over night. Carriers of coal and phosphate rock, Great Lakes grain and iron ore are free lances, but the carriers of package freight, the regular lines, the railroads of the water, have found they have a monopoly, and have consolidated, or united into rate conferences for the purpose of controlling rates. With competition eliminated, most of the reasons for government supervision of railroad rates also apply with regard to the supervision of water rates.

E. J. CLAPP.

STREET CAR TRANSPORTATION IN ST. LOUIS. The St. Louis Public Service Commission has recently issued a *Report on the United Railways Company of St. Louis*. The report is in two volumes, of which the first is largely given to an account of the results of a physical valuation of the properties of the company, and the second to a detailed study of street car service in St. Louis, with special reference to the overcrowding of cars.

The United Railways Company is the result of a merger of electric lines in the city and in St. Louis county. The merger dates from 1899 but the last outstanding property was not brought in until 1906. The capitalization of the company is a little over \$100,000,000, including nearly \$60,000,000 in bonds. But the commission finds that the "fair value" of the property is less than \$38,000,000, and that net earnings in 1911 exceeded a "reasonable return" on the investment by over \$1,000,000, and it accordingly recommends that better service be required.

The report on the valuation of the property, which was prepared

by Mr. James E. Allison, a member of the commission and its chief engineer, is a worthy companion to the notable report on *Rates for Electric Light and Power* previously issued by the same commission. Especially praiseworthy are the full accounts of the methods used in the work of valuation and the candid exposition of the principles involved in the choice of methods. In most respects these methods follow established practice, and, like other current work of the sort, owe much to the precedents set in the pioneer work of the Wisconsin commission. But at some points there are new and interesting departures.

Since the word "valuation" suggests the determination of exchange value or market price, which of course is itself determined by earning power, Mr. Allison prefers the expression "just amount" as denoting the capital sum to be determined as the criterion of the adequacy or reasonableness of present earnings. Original cost is held to be a better measure of this "just amount" than is reproduction cost, for the reason that the former is a more accurate measure of the amount actually sacrificed by investors in the service of the public. In the case of real estate, however, the present value is in general used, on the ground that the expectation of the "unearned increment" may have been one of the factors inducing the investment. In the actual work of valuation the usual inventory method was followed, although the inventory was made in unusual detail.

The report contains interesting discussions of such items as expense of organization, interest on organization expense, contingencies, interest during construction, working capital, superseded property, abandoned property, franchise value, cost of establishing the business, and bond discount. But the most striking departures from precedent are made in the discussion of depreciation. This part of the report has also been issued as a separate publication (*Should Public Service Properties be Depreciated to Obtain Fair Value in Rate or Regulation Cases?* St. Louis, 1912).

In the case of a large company, possessing varied properties, acquired at different times, it will be found, of course, that some items of property are new, other items are ready to be "scrapped," and still other items are at the different possible stages of wear or obsolescence. When the depreciation is measured by using the age of the various items of equipment and the average estimated life of such items, it will be found that the aggregate depreciated value of the properties tends to approach a "normal level," fixed about half way between the 100 per cent (undepreciated) aggregate value of the various items and their scrap value. Under the "straight line" method

of depreciation, for example, this normal level for the depreciated value of a large property (leaving scrap value out of account) is just 50 per cent of its undepreciated value. Having once reached this normal level the depreciated value will not tend to fall still lower, but will remain a fairly constant percentage of the undepreciated value. Hence, if such a company had accumulated a depreciation fund from the beginning of its operations, a large part of such a fund could never be used for renewals.

Now, Mr. Allison holds, even if a public utility property in satisfactory condition has a normal depreciated value of only 50 per cent of the original investment necessary to create the property, there is no valid reason why the company should not be allowed to earn on 100 per cent of the original investment, and this whether a depreciation fund has been maintained or not. The argument is essentially as follows: The company is entitled to earn on the whole amount actually sacrificed in the service of the public, and that is nothing less than 100 per cent of the original cost. To the obvious objection that the money which might have been put into a (useless) depreciation fund may actually have been virtually *taken out* of the business through high dividends in the past, Mr. Allison replies that to take account of this possibility at the present time would involve an unjustifiable regulation of past profits. If, however, there has been in the past any legal requirement of a depreciation fund, the amount of such a fund should be deducted from the gross valuation in order to determine the "just amount." Similarly, it is held, there may be a deduction on account of an *illegal* excess of past profits, but not on account of a merely unreasonable excess. In the opinion of the present writer it is hard to escape from Mr. Allison's logic unless one chooses to reject "cost of construction" as a measure of "just amount," and to substitute the principle of "net cost to investors" or "continuous property" once suggested by the Wisconsin commission.

A. A. YOUNG.

The Library of Congress has issued a new list of references on *Federal Control of Commerce and Corporations* (Washington, 1913, pp. 164). This is an expansion of lists previously published in 1903 and 1907. It includes references of a general character on interstate commerce, the constitutional question, Interstate Commerce Commission, and the Sherman anti-trust act. Another list, now in preparation, will contain references dealing with special applications of the principle of federal control, as, for example, the control of express companies, telegraph and telephone business, federal incorporation and taxes, and special application of the Sherman anti-trust act.

The Bureau of Railway Economics, Washington, has recently circulated an address by Frederick A. Delano delivered before the Economic Club of New York on *Are Our Railways Treated Fairly?* (Washington, pp. 11).

There has just appeared the *First Annual Report of the Public Utilities Commission of Rhode Island*, for 1912 (Providence, 1913, pp. 177, xix).

The American Telephone and Telegraph Company has issued during the past two years valuable documents relating to the legal position of the telephone business and also its commercial growth. Here are to be noted *Comparative Summary of Laws Relating to Regulation of Telephone and Telegraph Companies by Commission in Force November 1, 1911* (Boston, 1911, second edition, pp. 270); *Comparative Summary of Laws in Force September 1, 1912, Supplement to Second Edition* (pp. 80); *Telephone Statistics of the World* (May, 1912, pp. 35). This latter is illustrated with interesting charts.

In the official "Proceedings of the New York Railroad Club," for April 13, 1913 (95 Liberty St., New York), appears an address by Professor William J. Cunningham of Harvard University on *Administration of the State Railways of Prussia-Hesse* (pp. 3124-3166). There is also a report of a subsequent discussion.

President Shonts of the Interborough Rapid Transit Company has circulated a pamphlet on *A History of the Libel Suit of Clarence H. Venner against August Belmont* (pp. 155) in which there is a considerable amount of source information in regard to corporate financial methods.

Labor

INDUSTRIAL COMMISSION OF OHIO. Following the lead of Wisconsin and coming at about the same time as the reorganization of New York's department of labor, the Ohio legislature last March created an industrial commission of three members to be appointed by the governor who will take over all the work heretofore done by the various bureaus dealing with labor affairs. The various departments which will be absorbed by the new commission are those of: (1) the state liability board of awards; (2) commissioner of labor statistics; (3) chief inspector of mines; (4) chief inspector of workshops and factories; (5) chief examiner of steam engineers; (6) board of boiler rules; (7) state board of arbitration and conciliation.

The industrial commission is given comprehensive powers of in-

vestigation and control over places of employment and is empowered "to appoint advisers who shall without compensation assist the industrial commission in the execution of its duties." It may, if it so desires, retain in office the officers of the various bureaus whose authority it supersedes. It may "declare and prescribe what hours of labor, safety devices, safeguards, or other means or methods of protection are best adapted to render the employees of every employment and place of employment . . . safe and to protect their welfare as required by law." It is also to establish standards for the construction and maintenance of places of employment and enforce reasonable orders for the protection of the life, safety, and health of employees.

The commission is also instructed to do all in its power to promote the voluntary arbitration and conciliation of industrial disputes and may in pursuance of this duty appoint temporary boards of arbitration and shall designate a deputy to be known as chief mediator. It is to "investigate the extent and causes of unemployment in the state and adopt the most efficient means in its power to avoid unemployment, to provide employment and prevent distress from involuntary idleness."

Any employer affected by any order of the commission may apply for and obtain a hearing on the reasonableness of such order. The commission may, however, decline to grant a hearing if it deems this unnecessary, unless the petition for a hearing comes from the council or officers of a city or village. Actions to set aside the orders of the commission may be commenced only in the supreme court, and upon the application of either party the trial shall be advanced and assigned at the earliest possible date.

M. B. HAMMOND.

THE OREGON MINIMUM WAGE LAW. On February 17, 1913, the Oregon legislature passed an act "to protect the lives and health and morals of women and minor workers and to establish an industrial welfare commission and define its powers and duties, and to provide for the fixing of the minimum wage and maximum hours and standard conditions of labor for such workers and to provide penalties for violation of this act."

The act follows very closely, in most of its provisions, the Massachusetts law. The two most important deviations are the provision for the enforcement of the law and the penalty for violation of the law. The act does not attempt to determine what shall be the minimum wage, but makes it unlawful to employ women or minors in the

state of Oregon under conditions which may be detrimental to health or morals or for wages unreasonably low or which are inadequate to supply the necessary cost of living. The law does not attempt to determine what conditions are inimical to health or morals, but makes provision for the appointment by the governor of a commission of three to declare what are unreasonably long hours for women or minors, what should be the standard of conditions of employment, and what wage is adequate for support and health. The law further states that one of this commission shall represent the interests of the employed class, one the interests of the employing class, and the third shall be fair and impartial between the employers and the employees. The commission has full power to make investigations, to subpoena witnesses, and to take testimony in any hearing.

If, after the hearing, the commission is satisfied that any "substantial number" of women are working unreasonably long hours, under surroundings detrimental to health, or for unreasonably low wages, they may call a conference the members and chairman of which are appointed by the commission. The conference shall be composed of not more than three representatives of the employers in the occupation under investigation and an equal number of employees in the same occupation and not more than three disinterested persons, representing the public, and one of the commissioners. This conference has the power of inquiring into the case investigated by the commission. It sits as a jury in the evidence presented by the commission. The commission must summon any witness whose testimony is deemed material to the subject of the inquiry by the conference.

Upon completing the inquiry, the conference reports to the commission its findings in the case and makes recommendations. The scope of the conference's inquiry may cover: (a) standards of hours of employment for women workers and what are unreasonably long hours; (b) standards of conditions of labor and what are detrimental to the health or morals of women workers; (c) standards of minimum wages for women workers and what wages are inadequate to supply the necessary cost of living and maintain health. The conference is authorized to recommend rates for piece work which will be adequate to supply the necessary cost of living and maintain the workers in health; also a suitable minimum wage for apprentices and learners and the length of time they may be kept at work as learners.

The commission may accept any or all of the report or disapprove any or all of it, and may recommit the case to the same conference or to a new one. If the commission approves the report it must give

four weeks' notice that on a certain date a hearing will be given at which all persons interested may be afforded a hearing. The commission's order is effective after sixty days and it becomes a misdemeanor for any employer to employ any woman worker in any occupation covered by the order of the commission for longer hours or under different surroundings or at lower wages than those authorized by the order. If any of the provisions of the order are violated the offender, upon conviction, shall be punished by a fine of not less than \$25 or more than \$100 or by imprisonment and fine at the discretion of the court.

The commission may make exceptions to the general minimum wage order in the case of a physically defective, crippled, or aged woman, by the issuance of a license authorizing her employment and stating the hours, wages, and conditions of employment. Provision is made that any woman working for less than the minimum wage may recover the difference between the wage she was receiving and the authorized minimum wage, and any agreement regarding compensation will not be defense against the action. Witnesses are protected from discrimination by the law's making it a misdemeanor for any employer to discriminate against any employee because she has testified, is about to testify, or may testify. Upon conviction of such discrimination the employer is fined not less than \$25 or more than \$100.

The Oregon law is an improvement on the Massachusetts law in that it is enforceable by other means than public opinion. There is no appeal from the commission on fact; great freedom is given it; even the findings of the conference may be rejected. Although Oregon is a new state, has but one large city and is not a manufacturing state, a very large number of women will benefit under the law. It is not inclusive enough and it remains yet to be shown how a voluntary commission will succeed, but it is a long step in the right direction and Oregon is to be congratulated. The next step will be to include men, heads of families, within the scope of the act.

Washington State College.

A. W. TAYLOR.

WAGE SCALE BOARD OF THE DRESS AND WAIST INDUSTRY. The recent strike of garment workers in New York city, which involved about two hundred thousand men and women, attracted the attention of the country, not only by its magnitude, but by the novel features which were introduced in its settlement.

Some two years ago, the manufacturers engaged in the production of ladies' cloaks and suits, after a long and bitterly fought contest

with their employees, negotiated an agreement¹ with the International Ladies Garment Workers Union, by which an elaborate machinery was created for the adjustment of disputes between the employers and employees in that industry. This agreement is still in force, and while it has not worked with perfect smoothness in all particulars, it has proved successful in preventing strikes and lockouts and in adjusting all disputes as to wages and other conditions of labor in a peaceful manner.

Following the example of the cloak and suit industry, the manufacturers of ladies' dresses and waists terminated the strike of last January by negotiating a similar agreement known as the protocol of peace with the International Ladies' Garment Workers Union, which adopts substantially the organization and machinery created in the cloak industry for the adjustment of grievances and disputes. In one respect the dress and waist industry has improved upon the cloak industry by creating a "wage scale board" consisting of four members from the manufacturers' association and four from the union, the functions of which are best described in the following quotation from article VII of the protocol:

Such board shall standardize the prices to be paid for piece and week work throughout the industry; it shall preserve data and statistics with a view to establishing as nearly practicably as possible, a scientific basis for the fixing of piece and week work prices throughout the industry that will insure a minimum wage, and at the same time permit reward for increased efficiency. It shall have full power and authority to appoint clerks or representatives, expert in the art of fixing prices, and its procedure so far as practicable, shall be the same as now followed by the board of grievances in the cloak industry. It shall have full power and authority to settle all disputes over prices, make special exemptions for week work where special exigencies arise, or a special scale is required.

Article VIII of the protocol provides that:

Immediately after the signing of this protocol, the wage scale board shall, at the expense of both parties, make a complete and exhaustive examination into the existing rates paid for labor, the earnings of the operatives, and the classification of garments in the industry, and shall report in writing within six months from the date hereof the result of its labors.

In carrying out this provision of the protocol, the wage scale board has engaged Mr. N. I. Stone, the statistician of the late Tariff Board, to conduct the investigation of the industry. So far as known, this

¹A complete description of the agreement and its workings is given by Chas. H. Winslow in an article entitled "Conciliation, Arbitration and Sanitation in the Cloak, Suit and Skirt Industry," published in Bulletin 98 of the Bureau of Labor.

appears to be the first case on record of an industry investigating itself under the joint auspices of the manufacturers and the union, the two parties contributing equally to the expense of the investigation and the manufacturers agreeing to throw their books open to the investigators.

The object of the investigation will be, first, the ascertainment of the existing annual earnings and rates of wages of the different classes of employees in the industry, and second, the constructive work of standardizing the manufacturing processes employed in the industry, with a view to providing "a scientific basis for the fixing of piece and week work prices throughout the industry."

Another novel feature about this settlement is the fact that it is the union that has insisted upon the substitution of piece work remuneration in place of the week work system which prevailed in most of the factories before the strike.

Bulletin 116 of the federal Bureau of Labor Statistics is a study of *Hours, Earnings, and Duration of Employment of Wage-Earning Women in Selected Industries in the District of Columbia*, prepared by Marie L. Obenauer (Washington, April 8, 1913, pp. 68). This bulletin is a continuation of previous studies on women in industry found in volume V of the *Report of the Condition of Woman and Child Wage-Earners in the United States* (see AMERICAN ECONOMIC REVIEW, vol. III, p. 436) and in the bulletins of the Bureau of Labor, numbers 91 and 96. A considerable amount of the information is based upon visits to employees and the results show the necessity of checking up the returns of employers by data collected at first hand from workingwomen. Special inquiry was made in regard to overtime, vacations, and hours. Over four fifths of the women in department and retail stores work from 55 to 59 hours per week. The wages of nearly three fifths of the store women reporting were less than \$7 a week, and the average weekly wages of women in manufacturing and mercantile establishments was \$7.13.

The Department of Commerce and Labor has reported upon the federal workmen's compensation act of May 30, 1908, in a document entitled *Compensation for Injuries to Employees of the United States* (Washington, 1913, pp. 234). The data analyzed cover the three years 1908-1911. The number of employees brought under the act is 95,000, or one fourth of the total force. One half of the accidents fell under the operations of the Isthmian Canal Commission.

House Report No. 1441 of the Sixty-second Congress, third session, contains a collection of documents bearing on the subject of a *Federal*

Accident Compensation Act (pp. 218). It includes the report of the House Committee on the Judiciary, recommending amendments to Senate bill 5382 for the purpose of "liberalizing" the measure. To this is appended the report of the Employer's Liability and Workmen's Compensation Commission of February 2, 1912.

Bulletin 112 of the United States Department of Labor contains a compilation of *Decisions of Courts and Opinions Affecting Labor, 1912* (Washington, March 5, 1913, pp. 184). The introduction has an analysis of 30 pages by Lindley D. Clark.

The National Child Labor Committee has reprinted from the "Child Labor Bulletin" of November, 1912, an article on *Child Workers in Tenements* (105 East 22d St., New York, Pamphlet No. 181, pp. 47).

The Industrial Commission of Wisconsin has devoted several of its recent bulletins to the general subject of corporate organization for the prevention of accidents. Especially to be noted is the bulletin of February 20, 1913, vol. II, no. 1.

The *Twelfth Annual Directory of Labor Organizations in Massachusetts, 1913* (Boston, 1913, pp. 57), published by the Bureau of Statistics of Massachusetts, is of more than local interest as it contains a list of national organizations.

The *Third Annual Report of the National Employment Exchange, New York*, for 1912 (30 Church St., New York, pp. 36) again acknowledges that this agency is far from a business success. The per capita loss, however, in placing men has been lessened.

Bulletin No. 4 of the Massachusetts Industrial Accident Board contains the minutes of a conference on *Medical Service under the Workmen's Compensation Act* (Boston, April, 1913, pp. 17) at which 78 physicians were present. The law permits insurance companies to choose the visiting physician, but under a working agreement the patient is allowed the privilege. As a result, there have been occasional excessive charges. A committee was appointed to consider the difficulties.

A recent bulletin of the Industrial Commission of Wisconsin contains a report on *The Wisconsin Free Employment Offices* (Madison, May 20, 1913, vol. II, no. 9, pp. 193-238). The work of these agencies is analyzed for the ten-year period, 1901-1911. The commission's judgment as to their usefulness is on the whole favorable.

Further evidence in regard to the Lawrence textile strike early in 1912 is to be found in the *Annual Report of the State Board of Con-*

ciliation and Arbitration of Massachusetts for 1912 (Boston, 1913, pp. 144).

A new edition of *The Principles, Objects, and Methods of the Labour Association*, by E. Vansittart Neale (6 Bloomsbury Square, London, W. C., 1913, pp. 15) has been printed. The original statement was issued in 1885. The *Twenty-Seventh Report, 1912*, relates to the progress of co-partnership during the past year (pp. 48).

The Commonwealth Bureau of Census and Statistics, Melbourne, Australia, has issued a second report on *Trade Unionism, Unemployment, Wages, Prices, and Cost of Living in Australia, 1891 to 1912*, prepared by G. H. Knibbs (April, 1913, pp. 77).

Money, Prices, Credit, and Banking

According to Bulletin 114 of the United States Bureau of Labor Statistics on *Wholesale Prices 1890 to 1912* (Washington, 1913, pp. 160) wholesale prices averaged 3.4 higher in 1912 than in 1911. An appendix deals with relative wholesale prices, 1860-1912, continuing some of the analyses of the Aldrich report on prices.

The Department of Labour of Canada has issued its third report on *Wholesale Prices Data, 1912*, prepared by R. H. Coats (Ottawa, 1913, pp. xvii, 255). In 1912 the level of prices was lifted from 127.4 in 1911 to 134.4. In retail prices the advance was 5.8. This report, like its predecessor, is of more than local interest as it contains data in regard to price movements in other countries.

Bulletin 115 of the United States Bureau of Labor Statistics covers *Retail Prices 1890 to February, 1913* (April 8, 1913, pp. 168). This tabulation is restricted to prices of food products and coal.

The Library of Congress has published *Additional References on the Cost of Living and Prices* (Washington, 1912, pp. 120). This is a supplement to a list published in 1910. Especially to be noticed is the list of journals where current prices of commodities are to be found and a tabular statement of sources of index numbers of leading countries.

As a result of the wage agreement in May, 1912, between the coal operators and the mine workers, there was a general increase in prices of anthracite coal. In order to determine how far these increases benefited the workmen, Congress ordered an investigation by the Department of Commerce and Labor, and the report of this has now been published (Washington, March 1, 1913, pp. 128).

The *Third Annual Report of the Superintendent of Banks of Cali-*

formia, 1912 (Sacramento, 1912, pp. 509) is more than a routine report. It shows an active effort to enforce laws and discloses weaknesses in banking practices which are frequently glossed over.

The *Eleventh Biennial Report of the Bank Commissioner of Kansas for 1912* (Topeka, pp. 58) declares that the guaranty law "has been a success in every sense of the word." Reference is made to the new requirement of examinations of bank cashiers.

The *Twenty-first Annual Report* of the secretary of the state banking board of Nebraska, 1912 (Lincoln, 1913, pp. xxx, 348), also gives testimony as to the success of the guarantee feature of the state banking law which was enacted in 1909. Certain amendments are proposed. The guarantee fund in January, 1913, amounted to \$774,000.

In the *Annual Report of the Superintendent of Banks Relative to Savings Banks, Trust Companies, Mortgage Loan and Investment Corporations, Safe Deposit Companies, and Personal Loan Associations, for 1912* (Albany, 1913, pp. 644) a severe criticism is made of the departure of savings banks from their original purpose. "Competition in these industries has attained such proportions that they have almost outgrown the idea of their originators that savings banks should be institutions of philanthropic or beneficent character." Advertising campaigns have driven institutions to pay excessive dividends. Other evils are pointed out.

A Plan for the Organization of a Rural Banking System in the State of Virginia, by Charles Hall Davis, has been printed as Senate Document No. 1006 (62 Cong., 3 Sess., Jan. 14, 1913, pp. 32). The author, an attorney-at-law of Petersburg, Va., welcomes criticism of the proposed plan.

The United States Mortgage and Trust Company has issued its 1912 edition of *Trust Companies of the United States* (New York, pp. 442). The tabulation follows the form of its predecessors and assembles data nowhere else to be found. During 1912, 1579 companies reported, as compared with 1616 in 1911, the decrease doubtless due to the formation of mergers.

An address by James G. Cannon, president of the Fourth National Bank in New York, delivered before the Chamber of Commerce of Syracuse, in March, has been printed in pamphlet form under the title *Clearing Houses and Currency, No. 1* (pp. 23). Mr. Cannon again calls attention to the facilities which might be rendered by clearing house associations in providing currency.

The Annual Report for 1912 of the Jewish Agricultural and Industrial Aid Society (174 Second Ave., New York, pp. 64) shows the expanding operations of an agency for agricultural credit, referred to by Professor Kemmerer in his article on "Agricultural Credit in the United States" (see *AMERICAN ECONOMIC REVIEW*, vol. II, p. 852). In 1912, 390 loans were made, amounting to \$238,000. The average loan was about \$600. The total number of loans in thirteen years was 2568, made to 2266 farmers, occupying 1886 farms, distributed over 28 states and Canada; 405 loans were made in North Dakota. The work of the farm labor bureau is also described.

Public Finance

FINANCIAL STATISTICS OF CITIES. The census reports on the financial statistics of cities having a population of over 30,000 for the years 1909 and 1910 appeared within a few weeks of each other, on account of delay in printing the report of 1909. These reports continue the series first begun by the Department of Labor in 1898 and taken over by the Census Bureau in 1903. In the report for 1909 the discussion of accounting terminology and the scheme of classification have been considerably revised; and these features are substantially the same in the report for 1910. The report for 1909 includes 158 municipalities; that for 1910, based on the population census of that year, includes 184 municipalities.

Preceding the detailed tables of statistics, there are about 90 pages of text, explaining the terms employed, and presenting a general description of the tables. The detailed tables in the 1910 report cover more than 200 pages dealing with revenues and governmental costs, receipts and payments, and assets and liabilities, classified and subdivided in considerable detail, with summaries and per capita statistics on certain points.

As pointed out in the introduction, the task of preparing these reports involves many difficulties, due to differences in municipal organization, the lack of uniformity in accounting systems, and wide variations in methods of conducting business in so large a number of cities. Among the most valuable results of this work of the Census Bureau has been that of attracting the attention of local officials to the importance of improvements in accounting methods, and to the desirability of uniformity, so as to make possible comparable data.

Valuable as these reports are, some suggestions may be made for the purpose of making the information more readily available. It may be questioned whether the census classification has not been made too

elaborate—at least for the smaller cities—as indicated by the numerous blanks in many of the tables. A large gain in effectiveness would be secured by making some changes in the form of the tables. As now arranged, the list of cities is given in successive lines, while the various items of revenues, payments, etc. appear as column headings in a series of tables running throughout the report. Under this plan, the information about each city is widely scattered, and it is very difficult to secure a comprehensive idea of the financial situation of any city. A summary of the transactions, showing all the more important items, could be arranged within the limits of two pages, giving each city a separate column. This arrangement is used in the *Statistics of Municipal Finances* published by the Massachusetts Bureau of Statistics; and a similar arrangement of the census data would add greatly to its usefulness. Such a summary might contain all the data desired for cities below 50,000; confining the more detailed items to additional tables for the larger cities.

JOHN A. FAIRLIE.

The President's Commission on Economy and Efficiency has issued Circular 32, *The Administrative Purpose of the Accounting Methods and Procedures which have been Installed in the Departments* (Washington, 1913, pp. 13) and Circular 33, *Conclusions Reached with Respect to Expenditure Accounting and Reporting. A Discussion of the Information Needed and of the Methods Recommended as a Means of Producing It* (Washington, 1913, pp. 53). Circular 32 discusses the general need of standard accounting methods in the different departments of the United States government and outlines the general principles that should be followed in all departments. Circular 33 makes a more technical analysis of the plan recommended. Absolute uniformity in subsidiary accounts is not sought, and particularly is this true of rulings and forms of registers, files, etc. But the purpose is to have all departments keep the same principal accounts and to make periodical financial reports which shall have a common basis of comparison. More especially the purpose is to give the administrator definite control of financial operations and results.

The plan has a threefold mechanism: (1) Provision is made for a general ledger, in which any one account will represent a summary of particular kinds of transactions; this ledger contains only "controlling" accounts, which serve to give a clear panoramic picture of all the operations in the department. (2) Connected with the above are a number of subsidiary or detail ledgers; each account in the

general ledger represents a summary of a particular detail ledger. Thus, accounts receivable in the first "controls" the accounts receivable ledger, in which all the separate personal accounts are kept; the balance of accounts receivable in the first equals the sum of the individual balances in the second; at the end of a day or period, a single debit or credit to accounts receivable in the first equals the sum placed to all the individual accounts in the second. (3) Files should be kept containing the original record or evidence of every transaction; they should be classified so as to serve their purpose but with each class arranged in chronological order and each item definitely connected by cross references with the detail ledger in which it appears.

The general ledger is divided into two parts: (a) appropriation and fund accounts; and (b) assets, expenses, liabilities, reserves, and capital accounts. Periodically, a balance sheet is to be taken from these accounts, showing the financial standing of the department at the time. The system of accounting as described appears excellent, but the balance sheet in the form presented is open to serious criticism. To correspond with the general ledger, the balance sheet appears in two parts, the first devoted to appropriations and funds, and the second to assets, expenditures, liabilities, and capital accounts. The two parts are not definitely connected so as to show a total summary of conditions. In the second part, expenses are added in with assets, resulting in a confused total. Without special analysis, it is impossible to get the sum of the assets in charge of the department, or the sum of liabilities. The balance sheet is not clear and falls considerably short of the best issued by commercial concerns.

JOHN BAUER.

TAX SYSTEM IN THE DISTRICT OF COLUMBIA. Moved, apparently, by criticisms to which the present government of the District of Columbia has been subjected from various quarters, President Wilson has recently consulted municipal experts with a view to making Washington a kind of model city, a standard of efficiency and an object lesson for American cities generally. Assuming that popular rule, more or less adulterated with partisan politics, has failed to solve our municipal problems, one naturally looks to Washington for the development of the ideal city. It should be free from the evils of machine politics, for the residents have no voice in municipal affairs. Half of its expenditures are already borne by the federal budget, and property values are high enough to produce large revenues without excessive taxation. The conspicuous position of the city of Wash-

ington is another reason for using it as a model of efficient municipal administration.

Quite apart from the question of undertaking any such ambitious scheme of improvement, it is apparent that the tax methods of the District are in need of immediate overhauling. An amazing amount of inefficiency and injustice in the assessment of property for taxation is revealed in *Hearings Before a Subcommittee* (pp. 456) and *Report on Assessment and Taxation of Real Estate in the District of Columbia* (H. Rept. No. 1215, 62 Cong., 2 Sess., 1912, pp. 40). Stated in a single sentence, the committee found that "real estate is assessed irregularly, unscientifically, without system, and with gross discrimination between section and section, between class and class, between land and improvements." The law provides for triennial assessment of real estate, the separation of ground values from the value of improvements, and assessment at "not less than two thirds" of the true value. It was found that improvements are actually assessed at two thirds of their value, but that land is listed at only one third of its value on the average. The assessment of improvements, however, is far from uniform. Forty thousand small homes of government clerks and workmen are valued at 90 per cent of their true value, while the residences of the wealthy in fashionable sections of the city are assessed at only 50 per cent. Ground value assessments showed an even greater discrimination against the smaller properties, for while the land occupied by small homes is taxed at 60 per cent of its true value, sites occupied by fine dwellings and business buildings pay taxes on but 30 per cent of their value. The speculative suburban area also bears less than a third of its proper burden.

No one familiar with the workings of the general property tax in American cities will be greatly surprised at these conditions. The unique feature of the Washington situation, however, seems to be that these gross discriminations are the result of a deliberate policy. In the triennial assessment of 1909 the ratio of ground values to improvement values was 55 to 45, while in the 1912 assessment the ratio was 51.3 to 48.7¹, a result reached by a strange manipulation of the assessors' field books, which showed upon examination:

Page after page of systematic and uniform erasures and substitution of figures, reducing assessments already determined and entered at an advance in the speculative areas, and raising assessments already determined and entered, on small homes. Square after square of small houses already highly assessed—where there were absolutely no new buildings and no repairs and where depreciation is rapid and marked—were increased 20, 25 and 30 per cent.

¹ Improvements added for the year 1912-13 place improvement values above land values for the first time in twenty years.

Similar manipulations occurred in the case of property about to be taken by the government in condemnation proceedings. Many concrete cases of gross underassessment of the real estate owned by wealthy and influential individuals are cited in the report of the committee and in its published hearings. Altogether, the condition appears to demand not only improved administrative methods, but also remedial legislation.

Several fundamental defects in the tax system of the District are held by the committee to be accountable for this extraordinary laxness, inefficiency, and favoritism. The assessor and his assistants have practically life tenure and act as a board of review to pass upon their own assessments. The law requires that each piece of property shall be "personally viewed" by the assistant assessors collectively—a requirement which can be complied with only in the most perfunctory manner. The law is also at fault in constituting the assistant assessors an excise board, which subjects them to a double pressure from the brewery and saloon interests. The assessors' office employs none of the modern methods of valuing land or improvements, depending on "naked judgment" and rule of thumb. No attention at all is paid to business leases or actual purchase prices.

Eight specific recommendations for administrative changes and nine for legislative action are submitted along with the findings of the committee.

C. C. W.

REVISION OF TAX LAWS IN PENNSYLVANIA. A committee in continuation of one with similar powers appointed by the legislature of 1909 made a report in 1911, but found the double subject of corporate and revenue laws so vast that it asked to be continued and has now submitted its second report (*Report of the Joint Committee of the Senate and House of Representatives of the Commonwealth of Pennsylvania to Consider and Report upon a Revision of the Corporation and Revenue Laws of the Commonwealth to the Legislature*, Harrisburg, January, 1913, pp. 245, 184).

In studying the corporation laws of the state it was found advisable to limit the investigations and recommendations to private business corporations, excluding public service, insurance, banking, building and loan, and similar corporations, as well as corporations not organized for profit. The proposals constitute primarily a codification and simplification of the act of 1874, with its many amendments and supplements. Several important changes have been suggested, however, among which the following should be mentioned:

- (1) To bring Pennsylvania's law into harmony with the practice in

most states it is proposed to give corporations authority, which they do not now have, to engage in more than one kind of business. (2) At present the law does not require that any definite amount of capital stock shall be subscribed before the corporation begins business. The committee recommends that a subscription of at least 50 per cent should be required. (3) Another change proposed would prohibit a corporation from purchasing its own shares unless they are paid for in full and the purchase price taken out of surplus. It is also proposed to prohibit the holding of more than 20 per cent of the stock of another corporation. (4) As a remedy for stock watering, the committee suggests measures designed to prevent the issuance of stock and bonds greatly in excess of the real value of the property received, or labor and services contributed. It is further proposed that in the consolidation of corporations the paid-up capital stock issued shall not exceed the total amount of paid-up capital stock of the consolidating companies.

The Republican state platform of 1912 called for some regulation of "investment companies." The committee, after a careful consideration of possible remedies, urges the enactment of a statute based on the Kansas "Blue sky" law. This would put all corporations offering their securities to investors under the supervision of the banking commissioner, who would issue a license to companies whose financial condition and business methods he approved. To sell securities without this license would be an offense. The committee also goes a step further than the Kansas law by attempting to protect the public against investment brokers, who would also be required to procure a license from the banking commissioner.

The part of this report devoted to state finance is in the main a perfunctory performance. The first section, of about 70 pages, devoted to the objects upon which the state revenue is expended, offered an excellent opportunity for a careful analysis of the cost of state government. For some inscrutable reason the only expenditures to which more than passing reference is made are those for charities. In the years 1911 and 1912, \$6,249,500 was appropriated for the support of 275 institutions. About half of this amount was spent by private institutions over which the state exercises only a general, and apparently inadequate, supervision. This state subsidy to private institutions has been repeatedly condemned by the Conference of Charities and Correction, yet the present committee opposes even the gradual reduction of these appropriations. The soundness of the economic and social policy actuating the committee in this matter might be questioned. The report says:

Such objects of state expenditure as highways and schools are of great importance, but they must, under any relation of revenue and expenditure, be of vastly secondary importance to the care of the poor and suffering. The wealth of our state depends in great part upon industry and manufacturing, and these produce more than their share of accidental deaths and injury. They attract foreign laborers, who will in time become useful citizens, but who on their introduction to this country contain more than their share of the dependent classes.

In discussing the "need for increased revenues" several more institutions for dependents and delinquents are called for. The need of money for state highways, in order that Pennsylvania may not fall behind her sister states, is made to appear most urgent. That she is already far behind her neighbors in school expenditures is admitted; a study made by the Russell Sage Foundation is quoted to show that Pennsylvania ranks twenty-third in general efficiency among our state school systems and twenty-sixth in expenditure for children of school age, the total state expenditure being about \$3,750,000 a year.

Many of the recommendations for changes in the revenue laws are of relatively little importance, though the following are not without some general interest: (1) It is recommended that the mercantile license be continued, one half to be returned to the counties; (2) foreign insurance companies to be taxed on the same basis as domestic companies, to relieve the latter from retaliatory rates; (3) the extension of the gross receipts tax to certain public service corporations, such as transfer, gas, water, and water-power companies, all of which compete with companies already subject to such a tax; (4) the continuance of the policy of exempting manufacturing companies from the capital stock tax, for the sake of advertising the state and inducing manufacturers to locate there; (5) following the recommendation of the committee in its first report, the legislature in 1911 proposed a constitutional amendment to permit graded tax rates. This amendment is now declared to be "the greatest single measure of tax reform now before the people of the state," and the legislature is urged to submit it to a referendum in November, 1913.

To secure greater efficiency in the collection of taxes, steps in the direction of a centralization of the tax machinery are planned, along with a more liberal distribution of state taxes to local governments.

At least one of the committee's recommendations has some little significance for the residents of other states, and that is the levy of a tax of $2\frac{1}{2}$ per cent ad valorem on anthracite coal as prepared for market. Pennsylvania has a monopoly of anthracite, but the supply is rapidly being exhausted. The committee assumes, for some unex-

plained reason, that such a tax would be added only to the retail price of coal consumed outside of the state; in any case, as is pointed out, only 20 per cent of the output is sold in Pennsylvania.

C. C. W.

DEBT RESTRICTIONS IN MASSACHUSETTS. Speaking in condemnation of the enormous accumulations of municipal debt in this country, the late Justice Brewer once remarked that in his opinion the worst of all the trusts is "trust in the future." Indications are multiplying that our municipalities have reached a point where safety and justice demand a wider application of the "pay-as-you-go" policy. This problem of ever-increasing requirements for interest and debt payments in municipal budgets is attacked with courage and thoroughness in a *Report of the Joint Special Committee of the Massachusetts Legislature on Municipal Finance* (Doc. No. 1803, January, 1918). This was a recess committee appointed in 1912 to investigate the limit of municipal debt and taxes, the length of time for which municipalities should be allowed to borrow, and other related questions. An unusually thorough investigation resulted, the committee having sat for 74 days and held 101 sessions.

Thirty-two specific recommendations are submitted, from all of which, however, Boston is exempted, because its affairs are managed under special laws that could not well be made applicable to other cities. One of the important changes proposed is the abolition of statutory limitation on the amount of taxes which cities may assess, giving to each city the right to fix its own tax limit by ordinance. Mayors, according to another recommendation, would be entrusted with the duty of preparing an itemized budget, the city councils having power to decrease, but not increase, items; appropriations to be exceeded only in case of emergencies involving health and safety.

The law governing municipal debt in Massachusetts was originally passed in 1875 to check an abnormal increase in municipal indebtedness at that time. Special legislation, however, has for a long time served to defeat the purpose of the general statute. A study made by the Bureau of Statistics showed that in 1909 about 30 per cent of the taxes assessed went to pay interest charges and other debt requirements. Much of this debt burden was incurred for current expenses, a practice which the committee rightly condemns, believing that debt should be incurred only for permanent improvements and that all loans should be paid without fail during the life of the improvement. The committee is also to be commended for taking the position that where, as in the larger cities, certain permanent improve-

ments recur annually, they should be paid for out of current revenues and not out of loans.

The committee would leave the debt limit practically unchanged, that is, 2½ per cent of the average property valuations for the three years preceding in cities, and 3 per cent in towns. Perhaps the most significant recommendation made in the entire report is that the law giving cities and towns authority to establish sinking funds for the payment of debts be repealed, so that all future borrowings would have to be paid by the "serial payments method," which has been optional with towns since 1882.

It appears that many cities and towns have been in the habit of appropriating trust funds for general purposes without replacing them, a practice which the committee condemns, of course, and seeks to prevent in the future. In the assessment and collection of taxes several changes are suggested. The one of most general interest provides that "assessors be appointed by the mayors of cities and the selectmen of towns, the appointments to be subject to the approval of the state tax commissioner." A special effort was made to look carefully into the methods of local assessment. A part of the inefficiency found is attributed to the meager compensation of assessors and the shortness of the time allowed for their work. Its chief cause, however, is traced to local political influences. These the committee hopes to eliminate by having all assessors appointed, appointments to be subject to the approval of the state tax commissioner who would also fix their number and their compensation and have the power of removal. Although it finds a general underassessment, due to adopting old valuations, and to the desire to keep down the state taxes and to encourage property to locate in a given place or to keep it from leaving, the committee does not seem to have any remedy to propose. The tax map method is spoken of as "practically indispensable," yet no specific legislation is suggested to extend its use. C. C. W.

NEW YORK STATE FINANCES. In the single decade from 1902 to 1912 the expenditures of New York state have more than trebled, amounting last year to \$74,428,838. This startling increase Governor Sulzer determined to have investigated and on January 6, 1913, appointed a committee of inquiry to discover opportunities for securing economy and efficiency. After a sixty-day examination of the different state departments the committee reported (*Report of the Committee of Inquiry to Governor William Sulzer*, Albany, March 24, 1913, pp. 119) that the business of the state was run with no systematic plan whatever, work being duplicated and expenditures un-

necessarily multiplied. The principal remedy proposed was the creation of the office of commissioner of efficiency and economy, with power to examine all expenditures and make recommendations. A state board of contract and supply, with the duty of purchasing supplies for every department, was also proposed. With a view to the improvement of the budgetary system various proposals were made, the most important one being the creation of a state board of estimate.

Thirty-five bills in all were prepared and submitted to the legislature by the committee. Eleven of these were enacted, twenty-three were lost, and one was vetoed. The bill providing for a department of efficiency and economy was passed and Mr. John H. Delaney, a member of the committee of inquiry, has been appointed commissioner, with another member of the committee as one of the deputy commissioners. A board of estimate was also created, to consist of the governor, lieutenant-governor, president pro tempore of the senate, chairman of the finance committee of the senate, chairman of the ways and means committee of the assembly, speaker of the assembly, the comptroller, the attorney general, and the commissioner of efficiency and economy. The governor is president and the commissioner of efficiency and economy is secretary of the board, which is charged with the duty of preparing and recommending to the legislature detailed estimates of appropriations, as well as estimating the revenue for each fiscal year and making appropriate recommendations. The proposed board of contract and supply was not established.

One important feature of the committee's inquiry was the discovery that, because of errors in calculations, the annual appropriations for the canals and highways sinking funds have been in excess of the amount required for interest and amortization, with the result that the burden of debt payment has been thrown upon those who pay taxes for the first few years of the life of the debt. To relieve this situation it was proposed to reduce the annual contributions to the sinking fund until the error is rectified. C. C. W.

TAXATION IN RHODE ISLAND. The tax act of 1912 made a number of changes in the tax system, some of which were radical in character. The board of tax commissioners (three in number), itself created by the act, in its first annual report discusses the more important of these changes as follows:

(1) A reduction of the state tax against cities and towns (from 18 cents to 9 cents per \$100 of local valuation).

(2) Uniform blanks for local assessment rolls.

(3) The separate valuation of land, buildings and improvements, tangible personalty and intangible personalty.

(4) The imposition of a flat rate of 40 cents on each \$100 of valuation of intangible personal property (levied by local assessors except as noted in 5, 8, and 9).

(5) Relief of savings and participation accounts from taxation in the hands of the holder.¹

(6) The taxation of tangible personalty where found, with no offset for indebtedness.

(7) No offset of indebtedness except against money on hand, at interest or on deposit, and debts due from others.

(8) The application of the corporate excess method of taxation to manufacturing, mercantile and miscellaneous corporations, banks, trust companies, and banking associations (other than savings banks) in lieu of a tax upon the securities of such corporations in the hands of the holder.

(9) The application of the gross earnings tax to public service corporations, in lieu of a tax upon their securities in the hands of the holder, at the rate of 1 per cent, except for telegraph, telephone and cable companies (2 per cent) and express companies (3 per cent). Telegraph, telephone, express and street railway companies had been subject to a tax of 1 per cent on gross earnings under previously existing law. The new tax was additional in the case of the street railway companies, but not in the case of the other companies mentioned.

(10) The reduction in the rate of taxation on mutual fire insurance companies.

(11) The return by local assessors of all exempt property to the board of tax commissioners.

The new sources of revenue created for the state by the act of 1912 were as follows:

Taxation of corporate excess of manufacturing, mercantile and miscellaneous corporations.....	\$534,824
Taxation of shares of banks and trust companies.....	70,878
Taxation (additional) of gross receipts of public service corporations	182,858
Taxation of lessees of oyster lands.....	13,164
	<hr/>
	\$801,726
Deduct approximate amount of loss to the state by reduction of state property tax (difference between amount assessed in 1911 and 1912).....	453,504
	<hr/>
Net increase in state revenue due to act of 1912.....	\$348,222

¹ The previously existing tax of 40 cents on each \$100 of such deposits, assessed on the bank, is continued.

This net increase amounted to 13.7 per cent of the total state revenue collected in 1911.

The following figures for local taxation and valuation are based on returns from thirty-seven of the thirty-eight towns and cities of the state, one town having failed to make returns.

The general property tax in 1911 amounted to \$7,886,377. Deducting from this \$939,265 assessed on account of the state tax, there was left for the local treasuries \$6,947,112. The valuation was \$534,486,-444, giving an average tax rate of \$1.476 on \$100.

In 1912 the total tax less exemptions was \$7,950,099, deducting from which \$506,617, assessed for the state, there was left for the local treasuries \$7,443,482, an increase over 1911 of \$496,369, or over 7 per cent.

The valuation in 1912 was as follows:

Land	\$169,245,213
Improvements	245,375,479
Tangible personalty	92,946,515
	<hr/>
	\$507,567,208
Exemptions	7,240,651
	<hr/>
	\$500,326,557
Intangible personalty	91,056,529
Exemptions	22,350
	<hr/>
	\$91,034,179
Total less exemptions.....	\$591,360,736

This would give an average of \$1.344 on \$100. On intangible personalty the rate was 40 cents, and on tangible personalty and real estate \$1.516. Thus an increase of over 7 per cent in local revenue was secured while at the same time the average tax rate on all property was reduced 9 per cent, the rate on real estate and tangible personalty being increased less than 3 per cent.

A measure of the results of the new system might also be obtained by estimating the increase in the tax rate which would have been necessary to produce the additional \$496,369 under the old system. Assuming that the increase in the valuation of personal property in 1912 would have been about the same as in 1911, the raising of this additional revenue would have required an increase of over 6 cents per \$100, or over 4 per cent as compared with the rate of 1911. From whatever point of view it is regarded, therefore, the act of 1912 has affected favorably the finances of the towns and cities as well as the finances of the state.

All but four towns (with a combined population of less than 15,000) of the thirty-seven making returns showed an increase in tax revenue in 1912 as compared with 1911. Two of the four towns reduced their tax rates on real estate and tangible personalty from \$1.20 to \$1.00 and from \$1.24 to \$1.10 respectively. Of the thirty-three towns which showed an increase in tax revenue, six (including the city of Newport) increased the rate on real estate and tangible personalty, two reduced their rates, and the rates remained unchanged in twenty-five towns, including five of the six cities in the state.

It is impossible (owing to the lack of distinction between tangible and intangible personalty before 1912) to determine exactly how far the reduction in the rate on intangible personalty increased the assessment of such property. The valuations of personalty made by the local assessors in thirty-seven towns were: 1910, \$123,920,714; 1911, \$128,354,038; 1912, \$184,003,045, of which \$92,946,516 was tangible and \$91,056,628 intangible. Allowing for the increase which would probably have taken place under the old system, it is safe to estimate the increase due to the act of 1912 at approximately \$50,000,000. While a portion of this increase was doubtless due to the fact that under this act all tangible personalty was assessed where located, whereas previously only the tangible personalty of corporations was so assessed, and to the fact that the privilege of offsetting debts against tangible personalty was withdrawn, it is safe to assume that a large portion of the \$50,000,000 increase was due to the more complete assessment of intangible personalty. It must be remembered also that the act of 1912 withdrew from local assessment shares in all corporations subject to the state tax on corporate excess, bank shares, the shares of public service corporations subject to the tax on gross receipts, and deposits in savings banks and on participation account, all of which were previously, in theory, subject to local assessment. It is impossible to estimate the amount of these withdrawals, but whether or not the estimate of the board (\$300,000,000) is too high, it is certain that they represented a very large sum. Another change which tended to keep down the assessment of intangible personalty was the restriction to this class of property, exclusively of the privilege of offsets for debt. In view of these facts, the increase in the assessment of intangible personalty by local assessors during the first year of the new system is encouraging if not startling.

It would be interesting to know whether returns of property for taxation by taxpayers had increased in number, but the report throws no light on this question,

The new law has worked well in its first year and should show even better results as taxpayers and administrative officials become more familiar with its provisions.

The changes recommended by the board are of minor importance on the whole, chief among them being to assess tangible personalty on the basis of the average amount held during the year rather than on the amount held at a fixed date; to make the holders of such property liable for the tax when the owner is unknown; to exempt, on farms, a certain amount of livestock, tools, machinery used, and products stored; and to substitute a tax on gross receipts for the corporate excess tax, in the case of foreign manufacturing corporations transacting a mercantile business only in the state. H. B. G.

During the third session of the Sixty-second Congress the committee on expenditures in the Treasury Department took testimony on the subject of *Interest on Public Deposits* (Washington, 1913, pp. 168, 24 folded tables). There is a large amount of statistical data extending back to 1864, and tables showing the amounts carried by each bank at different periods. Treasury experts testified at the hearings. The committee severely criticises the present method whereby the government loses a large amount of revenue.

On March 1, 1913, President Taft transmitted a report prepared by the Librarian of Congress on the *Archives of Government Offices Outside of the City of Washington* (H. R. No. 1443, 62 Cong., 3 Sess., pp. 219). Reports show the character and location of manuscript material of the Treasury Department, Internal-Revenue Service, Mint, and Customs Service.

An index of the recent hearings before the Committee on Ways and Means on the *Tariff Schedules* has been issued as Volume 7 (62 Cong., 3 Sess., H. R. No. 1447, 1913, pp. 6347-6494). See REVIEW, vol. III, p. 472.

Mr. Harvey S. Chase, in a recent address on *The National Budget on the Expenditure Side* presents in compact and popular form some of the conclusions of the President's Commission on Economy and Efficiency in regard to methods of proposing a governmental budget. The estimated expenditures for 1913-14 are classified by: (1) purposes; (2) character of expenditures; (3) organization units; (4) acts of appropriation (Boston, H. S. Chase, 84 State St., pp. 14).

The *First Annual Report* of the Colorado Tax Commission, 1912 (Denver, 1912, pp. 288) describes the state tax system and makes recommendations. There are several pages of criticism of the federal

conservation policy, whereby, it is claimed, the development of the state is retarded.

The *Fourth Report of the Tax Commissioner of Texas for 1912* dwells upon the defects of the existing tax system, and recommends the separation of state and local sources of revenue (Austin, 1912, pp. 55).

A *Report of the Joint Legislative Committee of the Forty-seventh General Assembly Appointed to Take Up the Matter of Making a General Revision of Laws Pertaining to County and Township Organization and Those Relating to Roads, Highways, and Bridges for the State of Illinois* (Springfield, 1913, vol. I, pp. 129; vol. II, pp. 219) contains a history of road taxes in Illinois, by E. J. Brown, and a summary of the road legislation in the United States. The second volume is especially devoted to a history of local government in Illinois, prepared by Professor John A. Fairlie, chief clerk of the joint committee.

A *Report on the Examination of the Accounts and Methods of the Office of the Sheriff of New York County* has been made by the commissioners of accounts (280 Broadway, New York, April 28, 1913, pp. 25). An attempt has been made to fathom the mysteries of this branch of local finance. During the first six months of the years 1911 and 1912 the sheriff's fees increased approximately \$12,000 a year, and the sheriff received a far larger sum than the mayor of New York city.

A subcommittee of the board of taxes and assessments of New York city has made a brief report on *Taxes of Personal Property in New York State from 1880 to 1913* (Department of Taxes and Assessments, New York, 1913, pp. 7). The object of the report is to show: (1) The large revenue derived from special taxes on classified property in place of the old uniform personal property tax; (2) a larger revenue is derived from these special taxes than could be had by levying the personal property tax either at the current local rates or at a low rate such as 3 mills; (3) under the classified tax policy of New York the proportion of taxes paid by real estate has been greatly decreased; and (4) the passage of the secured debt law has not resulted in any loss of revenue but has found new revenue.

Under date of March 15, 1913, William A. Prendergast, comptroller of the city of New York, issued a report on a proposed system for *Central Purchase and Distribution of Supplies for the City of New York* (pp. 72). A description is given of the present method of

purchasing municipal supplies for which a central bureau is recommended.

The efficiency division of the civil service commission of Chicago has published *Analyses of Employment and Statistics Showing Departmental Organization and Distribution of Employees, City of Chicago, March, 1913* (pp. 99). This is supplemented by elaborate blue-print charts which will prove suggestive to students of municipal finance.

The Merchants' Association of New York has printed its *Recommendations Relative to the Administration of the Underwood Tariff Bill* (pp. 14) and also *Supplementary Recommendations* (June 3, 1913, pp. 26).

The Division of Education of the Russell Sage Foundation has prepared *A Comparative Study of Public School Systems in the Forty-Eight States*, which has a large amount of statistical data and numerous diagrams, showing among other things expenditures and investment in plant (400 Metropolitan Tower, New York, pp. 32).

Insurance and Pensions

MASSACHUSETTS REPORT ON WIDOWS' PENSIONS. In postponing legislation upon the subject of pensions to widows with dependent children until a state commission could study the question and report, Massachusetts set a standard that other states would do well to follow. But the hope that the Massachusetts commission would furnish a report that might also be accepted in other states as a standard method of inquiry has not been fulfilled. The volume in hand (*Report of the Commission on the Support of Dependent Minor Children of Widowed Mothers*, H. Doc. No. 2075, Boston, 1913, pp. 189) contains (1) a report of the commission signed by two members only (pp. 9-34); (2) a minority report (pp. 35-36) signed by the third member, who charges that the data upon which the report was based are wholly unreliable; (3) a copy of the bill called "an act to provide subsidies for children of indigent widows," which is recommended by the majority of the commission; (4) the report of the investigator employed by the commission to collect data regarding the present method of treatment of dependent children of widows; (5) two relatively unimportant appendices.

In discussing this report, two questions must be considered: (1) the character of the data submitted to the commission by its investigator and (2) the conclusions drawn from these data in the report of

the two members constituting a majority of the commission. In this review we are concerned rather with the investigator's report and the question of whether he submitted data sufficiently accurate and complete to serve as the basis of a report worthy of serious consideration. Although an exhaustive and painstaking inquiry was needed, the legislature appropriated the small sum of one thousand dollars for the work. When a commission is hampered by lack of funds, it may take any one of several courses; it may raise an additional sum by private subscription; or it may limit the scope of its inquiry; or it may content itself with merely collecting and recording impressions and opinions. The Massachusetts commission unfortunately refused to look the situation squarely in the face, and although acknowledging their inability to collect accurate data with so inadequate an appropriation, they decided to collect inaccurate data or what they are pleased to call "less accurate" or "less exact" data¹, and to attempt to present statistics covering all of the children's agencies and all of the relief societies in Massachusetts.

The investigation falls into two sections: the first deals with the results of a questionnaire sent to all of the child-helping agencies of the state, public as well as private; the second with the results of a questionnaire sent to all of the relief-giving agencies of the state, public as well as private. Each child-helping society was asked to answer certain questions regarding the widows' children under its care at any time between January 1 and July 1, 1912. It seems scarcely necessary to point out that this method of investigation could not be expected to produce reliable data. The term "children's agency" is constantly used as if these agencies all made equally thorough investigations before taking children, were all equally capable of giving trustworthy information, and all had common standards as to what constituted an unfit mother. As a matter of fact, the agencies to which the schedules were sent were "both denominational and undenominational and operating both by the institutional and

¹"Because of its small appropriation it was enabled to make a much less detailed and exact statistical study of the position of these widows than would have been desirable. Though believing that there are potent reasons of a non-statistical kind wherefore legislation should be recommended, the commission also believes that important inferences can be drawn from the special investigation made" (p. 11). "The resources of your commission did not permit it to secure its information by the personal visit of an investigator, hence the information must be less accurate than it might otherwise have been" (p. 12). "The commission believe that despite the limited accuracy of some of their relief statistics further study of the relief given by charities is not necessary" (p. 25).

placing-out methods," and they presented every possible difference in methods of work and in the efficiency of those in charge. Experienced social workers certainly would not agree with the statement of the commissioner's investigator that "these agencies know the causes on account of which they were willing to assume the care of these children. Presumably they are familiar with conditions in the families from which the children are taken. . . . This [information] is certainly the admission of these agencies, cheerfully given by their own officials, and therefore should be given credence" (p. 67).

Leaving the question as to whether this method of inquiry could possibly produce trustworthy data, two other points should be raised at the outset. The first is that the questions asked of the societies did not concern the children taken during the first six months of 1912, but all of the children that were under their care and supervision during this period. Efficient agencies that kept track of their children over a long period of years were, of course, reporting on causes of separation for very old cases, while less efficient societies that did not follow up the children placed out were reporting only on current or comparatively recent cases. But the commission was supposedly concerned only with what is happening today. Pension legislation would not be seriously recommended now because some children were mistakenly taken away from their mothers ten years ago. And yet the data from these old cases are counted in with those from current cases in spite of definite explanations like the following from one Boston agency, which, according to the report, handled ten children who should not have been removed from their mothers: "We have children from very few families that were broken up for financial reasons, and these we have had since the time when there was no such policy as exists now for the adequate relief of families in their own homes" (p. 79). The second point is that in view of the purpose of the report a mistake was made in treating the child and not the family as the unit.

It is interesting to ask just what light might have been thrown on the possible need of widows' pensions by a statistical inquiry. Suppose the data had been obtained not as the result of statements made by all kinds of agencies but as the result of inquiries made by impartial and competent investigators so that they might have been accepted as accurate. It would have been, in the first place, important to know not merely that 754 children were taken by the children's agencies, but the number of families represented; that is, the number of widows who were deprived of their children because there was at hand no organized relief agency, public or private, sufficiently competent to

prevent it. Other equally important questions naturally follow: Were these cases in which an entire family was broken up permanently? How many were cases of temporary removal of a single child in need of special care or attention? How many widows were deprived of their children for the cause of poverty alone, and because there was at hand no organized relief agency, public or private sufficiently competent to prevent it? Were the children taken as the result of a general policy of the most important children's agencies, public and private, or as the result of the work of a few incompetent societies that could be made to amend their ways? Such questions as these do not seem to be clearly answered by this report, even on the basis of the data that were furnished.

Table No. 2 shows 1,246 causes of removal for 754 children of widows. That is, some children were counted several times because "a child was reported taken not on account of one cause, but of a combination of two, three, or more causes." It is not easy to see why such a table should have been published. It might be taken for granted that the mothers whose children are cared for either by public or by private charity are destitute. The question at issue is whether these mothers were immoral, drunken or otherwise unfit, insane, in hospitals, unable to care for their children for any other reason than poverty. It would seem therefore to be unnecessary to consider these duplicate causes or to remark seriously on the basis of such a table that "insufficient income of mother and mother's absence from home at work are the two largest groups of causes and together constitute nearly 50 per cent of the total number" (p. 55).

True the report says that "a complete judgment" cannot be formed on the basis of this table, and further tabulation is made to eliminate the cases of children removed because of immorality, drunkenness, cruelty, or other forms of degradation. As a result 253 children are said to have been removed from mothers who according to the reporting agencies were "apparently proper persons" to care for them. In 43 of these cases, however, there was illness on the part of mother or child, and while it is quite true that illness in well-to-do homes is not a sufficient cause for breaking up families, it is also true that widows' pensions will not prevent the break-up of homes on the ground of illness; no widows' pension system will raise these homes to the level of sufficient comfort to provide for either mothers or children ill with tuberculosis or other contagious or incurable diseases except by removal to sanatoria. Eliminating these 43 cases of illness the number of children who were removed from mothers apparently fit to care for them was 210, in addition there are 25 other cases in

which the agencies "failed to answer in a positive manner" and although the report adds these to the number wrongfully taken away, there would seem to be no reason why they should be included. Although we are not told how many mothers are represented, assuming at least three children to a family, these 208 children may represent 70 families that had been broken up for poverty alone as against the 1,687 families kept together by the various relief agencies, and this group of 70 families includes, of course, families broken up by societies now using better methods.

The question, moreover, that should have been finally asked with regard to the families unnecessarily broken up was: Could the families have been cared for by existing relief agencies if the proper machinery had been set in motion? or, in other words, how many families were wilfully broken up by unintelligent and inefficient children's agencies that refused to call to their assistance the relief societies that were at hand?

That children's societies were guilty of such conduct the commission did not hesitate to acknowledge, as the following extract from the majority report indicates:

It appears that some agencies of some communities have made but little effort to keep families intact. Others have found by experience that the relief-giving agencies of the same region have been unwilling to take in charge families which would need relief for an extended period of time, or have offered only inadequate relief. Where the latter has really been the case, disapproval must not be unmixed. But where an agency has been willing to separate children from mothers for poverty especially, though relief societies are at hand, extreme disapprobation is deserved. A critic of the policy of separation should, however, carefully distinguish the offending from the un-offending agencies (p. 15).

For such cases as these the remedy is obviously not a new relief agency in communities where both public and private relief organizations are already available, but better supervision or control of the children's agency that refuses to make use of the organizations that are now standing ready to help.

Passing on to the second part of the report, the care of widow's families kept together by relief agencies—an even more difficult subject from the point of view of statistical presentation—the questionnaire method was still adhered to. The unit of tabulation, however, was changed. In the first part of the report 754 children were dealt with and the number of families was not given. In the second part the unit is the family and although reports were obtained concerning 1,687 widows that were enabled to keep their children together, we are not told how many children were provided for.

From the point of view of securing trustworthy data, the same statements apply here that were made regarding the statistics gathered from the children's agencies. Data obtained from all kinds of relief societies, public and private, efficient and inefficient, should never be treated as if equally valuable. The investigator says regarding his relief statistics that "it may be objected that the amounts stated in the various tables of this chapter do not actually represent the incomes of the families," but since the amounts were obtained by questionnaire from the relief agencies it is argued that "it would be a serious indictment of the relief agencies of the state to charge that they are unfamiliar with the conditions in the families which they help." It is a matter of common knowledge among social workers that many relief agencies do not know anything about the families they help. The following comment from the investigator's report is significant of the method of evaluating data:

These returns, therefore, are submitted, not as affording an accurate, but an approximate, index of the economic conditions of the widows' families reported to be in receipt of relief in this Commonwealth. In so far as they serve this purpose they are an indication of the policies and resources of the relief-giving agencies of the state in their care of families of widowed mothers with dependent children. In so far as they do not represent the conditions, it is due, in general, to the fact that the relief agencies did not know the conditions in these families, or did not report them correctly (p. 146).

It is stated further with regard to the character of the relief data handled that in one hundred cases visits were "made in the field by trained visitors employed by the state board of charity, and a much more detailed and more reliable description was secured than at first." As a result of this second inquiry the majority of the commission agrees that "many records previously received from the overseers of the poor, especially, but also from others, were glaringly incorrect. They were sometimes too high, sometimes too low. When the result was not essentially different the factors that produced it often were." But the final conclusion of the commission is that "despite these qualifications, the statistics first gathered by the investigator for the commission are by no means worthless. On the contrary, important inferences are possible. The schedules were by many indications very carefully and correctly filled out by some overseers and societies. Even when allowance is made for inaccuracy of other schedules, many clearly represent a condition inadequate for worthy families."

In conclusion it remains to repeat that with the resources given it, the commission was not able to collect accurate and trustworthy data;

and the question must be raised whether inaccurate data should ever be set forth in the form of statistical tables and seriously discussed. The report makes clear the fact that in social statistics, the data must be carefully scrutinized by some one sufficiently familiar with social work to know whether they are valuable. If they are inaccurate, there would seem to be no reason for tabulating them. That there are some thoroughly inefficient children's agencies and relief agencies in the state of Massachusetts is undoubtedly made clear, but this would have been generally agreed to without any investigation of any kind. The report does not offer any facts to show that the situation would be improved by adding a new public relief agency that may be just as inefficient in its turn. The commission further expresses opinions on a variety of questions that relate to the technique of social work. It is for each reader to decide whether the experience of the members of the commission has been such as to make these opinions valuable.

Chicago School of Civics and Philanthropy.

EDITH ABBOTT.

COMMENT BY PROFESSOR FOERSTER. I am glad to comment on what seem to me misconceptions in Miss Abbott's review of the Massachusetts report. The commission was forced to an economical program. Had its appropriation been \$10,000, instead of \$1,000, it might have tried to furnish "a standard method of inquiry," acceptable "in other states." Whether, therefore, the child or the family should best be the unit of study was, for example, never an issue. To use the child in one schedule, the family in the other, was far from pointless and was cheaper.

The commission, while alone responsible for its course, did not act alone. Its way of looking the situation squarely in the face was to invite counsel from the officials of leading charities. To them, as to us, the schedule method promised best. The commission discriminated between returns; many records were not accepted at all; others were sent back, even repeatedly, for amendment. The main results were approved and the recommendations likewise, even as to the technique of social work—except, perhaps, at one point—by persons long associated with charities and philanthropies in Massachusetts.

A word as to the removal statistics. The figures on page 68 classify the causes previously enumerated. For example, they show that the mother's absence from home at work or her insufficient income was generally a factor when illness was a factor, and was not incidental merely; since these are cases where removal should, according to the agency, not have taken place for financial reasons.

Another table shows that most separations were recent and not "ten years" old.

The separation of children from mothers has been, as a practice, declining in most quarters. Were it the only difficulty now, the simple solution, as Miss Abbott suggests, would be better control of the children's agency. (Attempts at such control have failed.) But a larger difficulty exists: the inadequacy of relief resources, public and private. Such inadequacy is common and in some regions is specially acute.

But has inadequacy of aid not been shown in the report? Miss Abbott cites a special field study of one hundred families. Half of these had first been reported to receive a per capita weekly income below fifty cents—often much below. The majority commissioners needed no proof that these were, as they said, "glaringly incorrect." And when these reports are ruled out, it is almost inevitable that fluctuating circumstances should explain other differences. The re-examination was made in December, months after the first study. How strange if the results had not been different! Earnings are seldom regular; subsidiary income fluctuates; overseers of the poor give more aid in winter. The second studies were indeed "more reliable," but did not disprove the first. And finally, the second series also reflected unnecessary destitution and hardship.

The Massachusetts Minimum Wage Commission found that \$6 or \$7 a week was typically earned by an adult woman with a family which had also an adult male worker. From charity and wages together our figures showed women to be receiving \$6 or \$7 a week where there was not also an adult male worker and where several children had to be supported. With every possible allowance our figures show a worse condition. Pages 153-161 of our report give the explicit testimony of the overseers of the poor as to their relief policies. To charity officials of Massachusetts at least, these tell no incredible story; indeed, usual payments are lower than the maxima given, as the family records received show.

Our appropriation permitted no model statistical investigation. The report makes frequent reference to specific doubtfulness of result, as well. But I believe that it sufficed to show that legislation was needed. The bill lately enacted, containing some important provisions drawn from the commission's bill may go far to achieving what seemed chiefly necessary; adequacy of aid and the influence of state standards upon local procedure. The measure, it is interesting to note, is closely similar to one recently enacted in Denmark, a country already well provided with a poor relief system.

R. F. FOERSTER.

In *A Report on the Pension System in the City of New York* by the commissioner of accounts of New York city (280 Broadway, May 27, 1913, pp. 12), evidence is given of the haphazard growth of municipal pension legislation. It is shown that pension laws are inconsistent in their application to different departments, that they are not subject to complete budgetary control, that they are discriminatory in their application to the civil service, and that there exists a possibility for discretionary administration of the pension funds.

The Insurance Department of New York has issued a pamphlet *Summary of Insurance Legislation for the Year 1913* (Albany, 1913, pp. 17).

Social Problems

The National Housing Association (105 East 22d St., New York) publishes a bulletin on *Housing Betterment*.

The *Annual Report of the State Charities Aid Association of New York, for 1912* (New York, 105 East 22d St., pp. 215) contains a brief historical review of the work of placing-out children during the past forty years.

The Chicago School of Civics and Philanthropy has issued a pamphlet, *Housing, Literature in Central Chicago Libraries* (Chicago, Survey Magazine, 116 So. Michigan Ave., 1913, pp. 40, 20 cents); 710 titles are listed, arranged under convenient topical headings.

Demography

The new federal Children's Bureau has issued its first monograph, entitled *Birth Registration* (Washington, 1913, pp. 24). It is announced that the first field study of the bureau will be on infant mortality. For this, accurate registration is necessary. Only New England and Pennsylvania have what are regarded as "adequate" birth registration laws in the United States. A model law is appended.

The Immigration Restriction League has issued a leaflet on *Immigration Figures for 1912*. This is a comparison of the fiscal years 1911 and 1912 from data furnished by the Commissioner-General of Immigration.

An address by Hiram F. Mills to the state inspectors of health of Massachusetts (Boston, State Board of Health, pp. 24) contains analyses of mortality statistics in Massachusetts.

Bulletin 14 of the fifth census of Canada is entitled *Birthplace of*

the People (Ottawa, 1913, pp. 19). The population born in the United States resident in Canada increased from 2.4 per cent in 1901 to 4.2 per cent in 1911. In the city of Edmonton the ratio runs up to 11.7 and in Vancouver to 10.4 per cent.

In the *Report on the Results of a Census of the Dominion of New Zealand, 1911* (Wellington, 1913, pp. vii, 178), a tabulation is for the first time made of the duration of marriage, the number of children born to the marriage, and the respective ages of husband and wife. For example, for the marriages of 25 years duration (but under 26) 91 per cent of the married women have children and the average number of children to the marriage, counting married women with children only, is 5.76. Similar figures are given for each year of marriage.

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Economic History, Foreign

(Abstracts by Clive Day)

ARDZROONI, L. *Commerce and industry in Spain during ancient and mediaeval times.* Journ. Pol. Econ., May, 1913. Pp. 31.

BULL, E. *Die sozialistische Bewegung in Norwegen.* Archiv f. Gesch. d. Sozialismus, III, 1913. Pp. 28.

CARISTIA, A. *Le idée sociali di A. F. Ozanam.* Riv. Intern., Apr., 1913. Pp. 12.

Ozanam was a distinguished Roman Catholic of the first half of the nineteenth century, who wrote influentially regarding the problems of poverty.

GONNER, E. C. K. *The population of England in the eighteenth century.* Journ. Royal Statist. Soc., Feb., 1913. Pp. 35.

A critical examination of previous estimates and of the material on which they are based; with an attempt to establish more accurate figures.

HAMMERICH, H. *De dansk-vestindiske Oer.* Nat ök. Tids., Nov.-Dec., 1912. Pp. 8.

A lecture on the social and economic conditions in the Danish West Indies.

HAYEM, J. *L'industrie de la draperie en France et la fabrication des draps à Romorantin, depuis Colbert jusqu'à la Révolution (1680-1789).* Rev. Intern. du Comm., Mar., 1913. Pp. 32.

Beginning of a series of articles, contributing from the archives new information on one of the important topics of industrial history.

JENKINSON, H. and STEAD, M. T. *William Cade, a financier of the twelfth century.* Eng. Hist. Rev., Apr., 1913. Pp. 18.

Printing an original roll of the reign of Henry II which lists the credits of a Christian money-lender and fiscal agent of the Crown, "the first English financier." The list shows transactions amounting to £5,000 in less than 200 items.

KEITH, T. *The influence of the convention of the royal burghs of Scotland on the economic development of Scotland before 1707.* Scottish Hist. Rev., Apr., 1913. Pp. 21.

An appreciation, from one point of view, of Scotch economic development and policy in the sixteenth and seventeenth centuries.

KUSKE, B. *Wirtschaftsgeschichte an Handelshochschulen.* Zeitschr. f. d. ges. Staatswis., No. 2, 1913. Pp. 18.

A strong plea for more attention to economic history in colleges of commerce, with a detailed program of the ground to be covered and

the methods to be employed, and with far-reaching promises of the benefits to be gained.

NEYMARCK, A. *Le développement économique, commercial, industriel et financier depuis un siècle et le mouvement international des marchandises.* Journ. de Soc. de Stat. de Paris, Jan., 1913.

PASTERIS, E. *Una missione sul Baltico.* Riv. Intern., May, 1913. Pp. 21.

A traveler's reflections on social aspects of northern Germany.

WILLGREN, K. *Zur Agrargeschichte Schwedens im früheren Mittelalter.* Jahrb. f. Nat. Oek., Feb., 1913. Pp. 28.

Review of some of the characteristic features of Swedish agrarian development, with references to modern writers and to the sources; interesting but not always convincing.

Economic Geography

(Abstracts by E. V. D. Robinson)

BROWN, R. G. *The conservation of water powers.* Harvard Law Rev., May, 1913.

CAHEN, H. *La houille blanche.* Mus. Soc. Mém. & Doc., Apr., 1913.

Largely technical, describing different types of installations and the industries employing hydraulic power; map of zones of hydro-electric power; also brief summary of legislation.

DALE, D. P. *The work of the United States Reclamation Service.* Wis. Engr., Feb., 1913.

ECKEL, E. C. *The iron and steel possibilities of the South.* Mfrs. Rec., Mar. 27, 1913.

ECKERT, M. *Die wirtschaftsgeographische und handelspolitische Bedeutung der Weltmeere.* Geographische Zeitschr., XVIII, 2, 1913.

GRAY, L. C. *The economic possibilities of conservation.* Quart. Journ. Econ., May, 1913.

A very careful discussion, bringing out the economic prerequisites and effects of conservation.

KNOWLES, M. *Public utility regulation and its relation to water conservation.* Pro. Engrs. Soc. of W. Penn., Jan., 1913.

LEWIS, J. H. *State and national water laws, with detailed statement of the Oregon system of water titles.* Pro. Am. Soc. of Civ. Engrs., Mar., 1913.

MCGRATH, W. H. *The Connecticut Power Company.* Stone & Webster Pub. Serv. Journ., June, 1913.

The corporation represents a consolidation controlling various long-time franchises.

PARKER, E. W. *The geographical distribution of mining development in the United States.* Bul. Am. Inst. of Min. Engrs., Mar., 1913.

WAPPES, L. *Zur Systematik und Methodologie der Fortwissenschaft.* Archiv f. Sozialwis., Jan., 1913.

Cost of irrigation works per acre supplied with water. Engg. News, May 15, 1913.

Cost rising because easiest projects undertaken first, and prices of materials and labor advancing. Average cost per acre recently \$53 in private projects, \$41 on U. S. reclamation projects, six per cent interest on deferred payments on private projects; none on government projects. Government work also more permanent.

What is the matter with irrigation? Engg. News, June 12, 1913.

Irrigation bonds practically unsalable. Many concerns have been fraudulent; most of the others have failed because not enough bona fide farmers of sufficient intelligence and capital could be found to occupy the land. The land speculator has been the greatest obstacle to the success of federal irrigation projects.

Case and Comment, March, 1913.

Contains the following: "Who owns the water powers?" by R. C. Brown; "Governmental diversion of nontidal waters," G. J. Couch; "Percolating water and the common law," H. P. Farnham; "Correlative rights in percolating waters," L. A. Wilder; "The law of irrigation in the Far West," J. B. Clayberg; "Early history of the doctrine of appropriation," J. R. Long; "The reclamation of the arid West," S. E. Bowdle.

Agricultural Economics

(Abstracts by James B. Morman)

ARDANT, G., et al. *Les transformations agraires de la Russie*. Réf. Soc., May 1, 1913. Pp. 22, 18.

Reviews the history of land tenure systems in Russia from 468 to the present time. The data include accounts of the decadence of communal ownership, the changing relations of the peasant to the soil, and the rise of individual land ownership. The issue of May 16 contains the discussions upon the paper.

ARDOUIN-DUMAZET. *Le remembrement de la propriété dans l'île de Ré*. Journ. d'Agr. Pratique, Mar. 27, 1913. Pp. 3.

The economic advantages secured to landowners on the islands off the coast of France by exchanging small separated parcels of land for a single contiguous holding of equivalent area are presented.

BREITUNG, E. N. *Is cheap money for the farmer a myth?* Business America, May, 1913. Pp. 3.

Argument for the establishment of a corporation with a large credit capital and a very small cash capital which might loan money profitably to farmers at 4 or 5 per cent.

BREITUNG, E. N. *Money for the farm*. Country Gentleman, May 24, 1913. Pp. 2.

A review of the European land credit systems based on the amortization plan of converting farm mortgages into annuity contracts, and a plea for the establishment of such a plan in America.

BRINKMANN, T. *Veränderungen in der Betriebsweise der rheinischen Landwirtschaft und ihre Ursachen*. Fühlings Landw. Zeitung, Oct. 1, 1912. Pp. 19.

The changes in methods of farming during the past thirty years in the Rhine country are discussed. The most striking changes are the use of machinery on small farms, the extent of the areas devoted to cereal crops, and the diminishing number of livestock kept on farms.

CAMPBELL, R. A. *Coöperation in Wisconsin*. Rev. Rev., Apr., 1913. Pp. 7.

Notes and statistics are given on coöperative fruit-growers' associations, butter and cheese factories, grain elevators, potato and tobacco warehouses, cow-testing associations, and fire insurance and telephone companies in Wisconsin.

CABLE, G. *La culture de riz à Madagascar*. Journ. d'Agr. Pratique, Jan. 30, Feb. 6, 1913. Pp. 3, 4.

The extent and methods of rice culture and the social and economic importance of this industry in Madagascar are discussed.

DESTRAY, P. *Un document officiel sur l'exode rural: l'enquête sur les salaires agricoles*. Grande Rev., Mar. 25, 1913.

An official statement by the minister of agriculture regarding the means of preventing the exodus of young people from the farms. Remedies suggested are the industrialization of agriculture, closer relations between producers and consumers, and the suppression of speculation in food supplies.

DISEREUS, M. *Switzerland. The re-stripping of holdings: its present state and practical results*. Bull. Econ. & Soc. Intelligence, Mar., 1913. Pp. 25.

An account of the minute subdivision of farm lands in Switzerland under the custom of land inheritance, the economic advantages already secured by re-distribution of land into contiguous holdings, and of the results which may be expected from an extension of the plan.

DE DOMINICIS, F. *Il disboscamento nel mezzogiorno d'Italia*. Riv. Intern., Aug., 1912. Pp. 21.

A rehearsal of the consequences for agriculture of the extensive deforestation of southern Italy.

GUYOT, Y. *Le rôle économique des céréales*. Journ. des Econ., Oct. 15, 1912. Pp. 24.

This paper presents statistics on the world's production of cereals from 1900 to 1912, and discusses the increasing consumption of wheat and the urgent need of increasing its yield in wheat-growing countries by intensive culture.

VON HATTINGBERG, J. R. *Fluctuations in the burdens on ordinary rural landed estate in Austria*. Bull. Econ. & Soc. Intelligence, Mar., 1913. Pp. 18.

Statistics on the number and size of farm holdings in Austria; discussion of the increasing indebtedness on these farms; and an argument for the establishment of a larger credit organization in conformity with the increasing requirements of the farmers as a result of changing economic conditions.

HERRICK, M. T. *The farmer and finance*. Atlantic, Feb., 1913. Pp. 9.

The reasons are given why systems of land credit and personal credit should be established in this country as a means of making the credit of farmers more easily negotiable. An outline is given of the systems of credit as conducted by and for farmers in Europe.

HIBBARD, B. H. *Tenancy in the southern states*. Quart. Journ. Econ., May, 1913. Pp. 15.

Statistics on farm tenancy in the South as derived from the census of 1910, with a discussion of its development, tendencies, and relations to intensity of cultivation, land values, character of crops grown, amount of livestock kept, value of buildings, etc.

JENKINS, D. *Agricultural machinery in Sweden*. Daily Cons. & Trade Rpts., Apr. 9, 1913. Pp. 6.

This article gives the acreage of tilled and meadow lands in Sweden, the number and size of farms, the extent of the manufacture and use of implements and machinery, and the growth of schools for farmers in which instruction is given in the care and use of farming machinery.

JENSON, A. *De høje Priser paa Landejendomme*. Nat. ök. Tids., Sept.-Oct., 1912.

Land has changed hands more freely and at higher prices during the past year than ever before in Denmark. The author has gathered agricultural statistics to ascertain causes and tendencies.

LUCAS, J. E. *L'approvisionnement en lait de Paris*. Mus. Soc., Mém. & Doc., Jan., 1913. Pp. 18.

A detailed discussion of the problem relating to the milk supply of Paris. It includes statistics from 1896 to 1910 of the milk brought by railroad, the cost of producing milk in winter and summer, the cost of collection and distribution, and suggested remedies for increasing the milk supply and decreasing the high cost of living.

MARCHETTI, L. *Die Kollektivpachtgenossenschaften der Landarbeiter in Italien*. Zeitschr. f. Socialwis., Apr., May, 1913. Pp. 9, 9.

These papers treat of the organization of coöperative farming societies by farm laborers in Italy, their political, social, moral and economic aims, their effectiveness in diminishing non-employment and increasing wages, the different types of such societies which range from individualistic to socialistic, and the progress made by these societies in Lombardy, Emilia, Sicily, and other provinces.

MILLER, E. E. *The new spirit in southern farming*. Rev. Rev., Apr., 1913. Pp. 6.

An account of the evolution of diversified farming in the South which has resulted in better economic returns and is promoting an appreciation of a higher standard of living among southern farmers.

MORGAN, H. H., et al. *Irrigation in various countries*. Daily Con. & Trade Rpts., Apr. 5, 1913. Pp. 8.

The extent, importance, and progress of irrigation in Spain, Roumania, Italy, Peru, and the United States are reported.

NANNESON, M. L. *Measures adopted in Sweden to spread bookkeeping among farmers*. Bull. Econ. & Soc. Intelligence, Feb., 1913. Pp. 3.

NELSON, A. C. and WATTS, E. *Maintaining soil fertility in northern Europe*. Daily Cons. & Trade Rpts., Apr. 16, 1913. Pp. 3.

The provisions of farm leases in Holland and Belgium which aim to maintain the fertility of the soil are discussed.

DI NOLA, C. *Gli odierni aspetti dell' economia agraria*. Giorn. d. Econ., Jan., Feb., 1913. Pp. 27, 22.

A study of the economic value of the factors in agricultural production and of their different combinations.

NORTON, E. J. *Agricultural improvements in India*. Daily Cons. & Trade Rpts., Apr. 9, 1913. Pp. 3.

PASQUET. *Le crédit agricole mutuel dans le midi de la France*. Réf. Soc., May 16, 1913. Pp. 7.

Statistics of the number, average, and total of loans made by the district bank for the south of France for the years 1900 to 1912, inclusive, are presented and discussed, together with a plea for more capital to encourage the development of agriculture.

PINCUS, J. W. *Agricultural coöperative credit associations in America*. Nat. Stockman and Farmer, No. 45, 1913. Pp. 4.

An account of the work by the Jewish Agricultural and Industrial Aid Society in furnishing financial aid to farmers, the progress of the movement, and the benefits secured.

POWELL, B. E. *Illinois working for permanency in agriculture*. Rev. Rev., Mar., 1913. Pp. 5.

An account of what the farmers of Illinois are doing under the lead of the agricultural experiment station to increase the yields of crops while maintaining or improving the fertility of the soil.

PLYLE, J. G. *A farm revolution that began in a greenhouse*. World's Wk., Apr., 1913. Pp. 7.

Describes the pot experiments to determine the plant-food requirements of soils and the practical five-acre farm demonstration work carried out by the Great Northern Railway Company in Minnesota and North Dakota which resulted in nearly doubling the yields of wheat, barley, and oats per acre in 1912. The company is conducting 387 such demonstration farms this year.

RACAH, V. *La mezzadria e i doveri del proprietario*. L'Agr. Moderna, Jan. 31, 1913. Pp. 2.

A review of the agitation in Italy during the past ten years regarding the principles of tenant farming, and a discussion of the principles governing farming on shares from the landowner's point of view.

SAGAWE, B. *Die Rentabilität des Hackfruchtbaues*. Fühling's Landw. Zeitung, Feb. 15, 1913. Pp. 16.

The greater profitability of intensively cultivated crops as compared with extensive farming (that is, much land under forage crops and in meadows) is shown by means of tables derived from data secured on a large number of farms in Germany, and the data are discussed in detail.

SAGNIER, H. *L'évolution de la production du blé*. Journ. d'Agr. Pratique, Jan. 23, 1913. Pp. 4.

Statistics on the acreage, total and average annual yields, and price of wheat in France from 1821 to 1912, inclusive, and of the production and average yields in the chief wheat-producing countries of the world during three decades ending with 1910.

SAGNIER, H. *Le fonctionnement du crédit agricole*. Journ. d'Agr. Pratique, Jan. 16, Mar. 27, May 1, 1913. Pp. 3, 1, 2.

A discussion of the functions performed by the district agricultural credit banks in France, particularly as banks of discount in advancing money to local coöperative credit banks, as land banks in making loans to agricultural coöperative societies, and in making long-term loans to individuals for the promotion of small landowning.

STARRETT, H. P. *Cost of producing Cuban cane sugar*. Daily Cons. & Trade Rpts., Apr. 8, 1913. Pp. 4.

Statistics on the cost of cultivating and producing 90,000 tons of cane, cutting and loading same on carts, hauling from fields and loading on railroad cars, cost of hauling to mill, and the mill cost of manufacture.

STROUT, E. G. *The remedies for rural depopulation in Great Britain*. Bull. Econ. & Soc. Intelligence, Jan., 1913. Pp. 5.

Abstract of a paper of 42 pages which gives detailed accounts covering eighteen years of the cost of raising different crops and of stock keeping in England, to prove the profitableness of cereal growing. In addition to the remedies that have been put in force to bring about rural repopulation, valuable suggestions are presented by the author.

THACKARA, A. M. *Maintaining soil fertility in Germany*. Daily Cons. & Trade Rpts., May 21, 1913. Pp. 2.

Data on the increasing use of commercial fertilizers in Germany during the past twenty years are presented and discussed, together with some lease stipulations made for maintaining soil fertility where farming is carried on intensively.

ZANNONI, I. *Le migrazioni interne agricole*. L'Agr. Moderna, May 15, 1913. Pp. 2.

Statistics gathered by the Bureau of Labor concerning the migration of men, women, and boys from the various provinces of Italy to engage in farming during the months of May, June, and July are presented, the wages received by these laborers are given, and the economic results of this migrating farm labor are discussed.

ZOLLA, D. *La production et le prix des laines*. Journ. d'Agr. Pratique, Apr. 17, 1913. Pp. 4.

Statistics on the world's production of wool, the imports by Europe and North America from 1893 to 1912, and the variations in price during these years.

Agricultural coöperation in France. Bull. Econ. & Soc. Intelligence, Apr., 1913. Pp. 10.

An official article submitted by the French government to the International Institute of Agriculture.

Agricultural coöperative banks in Germany. Bd. Trade Labor Gazette, Mar., 1913. Pp. 2.

Statistics for 1910 and 1911. The rural credit banks on Jan. 1, 1913, numbered 16,927.

Agricultural coöperative credit societies in England and Wales in 1911. Journ. Bd. Agr., Jan., 1913. Pp. 7.

————— *Agricultural credit banks in France in 1911.* Journ. Bd. Agr., Mar., 1913. Pp. 4.

————— *Agricultural credit for small holdings in Roumania.* Bull. Econ. & Soc. Intelligence, Feb., 1913. Pp. 10.

The importance of the different credit societies and banks in the economic elevation of the peasants is pointed out and statistics on their work and membership are presented and discussed.

————— *Agricultural organization in French West Africa.* Bull. Econ. & Soc. Intelligence, Jan., 1913. Pp. 9.

Changes in the number and size of agricultural holdings. Journ. Bd. Agr., Mar., 1913. Pp. 2.

Data for England and Wales in 1911 and 1912 are compared and discussed.

————— *Coöperative agricultural societies in the United Kingdom.* Bd. Trade Labor Gazette, Mar., 1913. P. 1.

Complete returns of number, membership, business, etc., for 1912.

Extension of agricultural coöperation in Germany in 1912. Bull. Econ. & Soc. Intelligence, April, 1913. Pp. 3.

Complete data for 1912. The number of coöperative societies was 26,576, of which 16,927 were loan and savings banks. The net increase for the year was 1,314 of which 683 were credit banks.

————— *Insurance against damage to crops by hailstorms.* Journ. Bd. Agr., Mar., 1913. Pp. 5.

Statistics and other information are given on the prevalence of insurance against hail in England and Wales, the premiums charged for various crops, and the amount of damage done by hail in different counties.

————— *The most recent results of the work of the Danish land credit associations.* Bull. Econ. & Soc. Intelligence, Jan., 1913. Pp. 6.

Organization of land credit and the bank of mortgage credit in Chili. Bull. Econ. & Soc. Intelligence, Mar., 1913. Pp. 11.

This article shows how the civil code of Chili of Dec. 14, 1855, has promoted the increase of land credit.

————— *Various forms of land settlement in Australia.* Bull. Econ. & Soc. Intelligence, Mar., 1913. Pp. 9.

A brief account of the evolution of the present land system in Australia and of the classification and administration of government lands.

————— *The world's flax production.* Daily Cons. & Trade Rpts., Apr. 5, 1913. Pp. 2.

Commerce

FOBBAT. *Des moyens de dispenser du paiement des droits d'entrée les marchandises importées à condition.* Rev. Intern. du Com., Mar., 1913.

GEHRKE, F. *Änderungen in Wesen und Richtung des Handels.* Zeitschr. f. d. ges. Staatswis., No. 2, 1913.

- DE LEENER, G. *La question des syndicats maritimes jugée en Belgique*. Rev. Econ. Canadienne, Mar., 1913.
- OPPEL, A. *Hamburgs und Bremens Stellung im internationalen Warenhandel*. Weltwirtsch. Archiv, Apr., 1913.
- SHAW, A. W. *Some problems in market distribution*. Quart. Journ. Econ., Aug., 1912. Pp. 62.
- TCHERNOFF, I. *La crise du marché à terme et la proposition de Monzie devant le parlement*. Journ. des Econ., May, 1913.
- TURMANN, M. *La technique des affaires à terme sur marchandises*. Mouvement Social, May 15, 1913.
- WILLIAMSON, C. F. *Selected references on markets and marketing*. Special Libraries, Mar., 1913.
- WOLFE, A. J. *The Leipzig fair as it is today*. Daily Cons. & Trade Rpts., Apr. 2, 1913.

Railways

(Abstracts by Ernest R. Dewsnup)

- ALLIX, G. *La convention internationale du Gothard*. Journ. des Transports, Mar. 22, 1913. Pp. 2½.
- ALLIX, G. *Résultats de l'exploitation des chemins de fer français, Anglais et Allemands en 1911*. Journ. des Transports, June 7, 1913. Pp. 3½.
- A summary of M. Colson's annual comparison of the results of railway working in the three countries named. Germany has been the most fortunate, her railway income having increased 7.7 per cent during the year while expense of operation increased only 4.1 per cent. As a result her net income increased 15.2 per cent, as against 2.9 for England and a decrease of 2.3 for France.
- BERGLUND, A. *Valuation of railroads in the state of Washington*. Journ. Pol. Econ., Apr., 1913. Pp. 13.

An explanation as to how the commission determined the value of railroad properties within the state and as to how it arrived at a differentiation of the values of properties used in the conduct of state and interstate business respectively.

- CUNNINGHAM, W. J. *The Prussian-Hessian state railways*. Ry. Age Gaz., Apr. 25, 1913. Pp. 6.

A general review of the conditions of operation of the Prussian railway system, winding up with the conclusion that state ownership of railways in Prussia is successful and that the railways are operated with reasonable efficiency.

- FOWLER, J. A. *The commerce court*. No. Am. Rev., Apr., 1913.

The writer believes that the Commerce Court will adapt its views of the law to those of the Supreme Court, and that, if permitted to continue, criticism of its action will doubtless soon cease.

- LELAND, C. E. *Federal and state coöperation on rates*. Central Law Journ., May 2, 1913.

Proposes conferences between the Interstate Commerce Commission and the state commissions, the findings being made binding upon the boards represented.

LOREE, L. F. *Causes and cure of deficient use of freight cars.* Engg. Mag., Apr., 1913. Pp. 5.

The president of the Delaware and Hudson Railroad presents an analysis of the time consumed in a typical freight car movement. The public has the car 36 per cent of the time, a proportion that should be reduced through readjustment of demurrage penalties and reconsignment privileges. Improvement of railroad terminal facilities offers the largest opportunity of reduction of delays in movement.

McPHERSON, L. *The problem of railway valuation.* Ry. Age Gaz., May 23, 1913. Pp. 3.

MERCIER, P. E. *Les chemins de fer canadiens.* Rev. Econ. Canadienne, May-June, 1913. Pp. 11.

Sets forth the more important railway traffic and operating statistics of the last few years.

PAYNE, J. L. *Freight rates by water and by rail.* Ry. Age Gaz., Apr. 18, 1913. Pp. 3½.

A study of Canadian water and rail rates by the comptroller of statistics of Canada. His conclusion is that the water rates are not lower than the rail when the public contribution is taken into account.

RIPLEY, W. Z. *Are the railways fairly treated?* Ry. World, June, 1913. Pp. 1½.

A carefully formulated revision of rates is undoubtedly necessary. The Erdman act should be amended. State legislatures ought to refer matters of railway regulation and service to the state commissions.

THIESS, K. *Die Weltspur der Eisenbahnen. II.* Weltwirtsch. Archiv, Apr., 1913. Pp. 17.

The second instalment of this article is devoted to an account of the inquiry into the desirable width of gauge, made by the special Japanese commission appointed in 1911.

THOMPSON, S. *Railway capitalization.* Ry. & Engg. Rev., May 24, 1913. P. 1.

The net capitalization of railways (gross capital less railway securities owned by railways) in the United States, on June 30, 1912, is figured at \$61,508 per mile.

WILLARD, D. *Why freight rates should be increased.* Ry. Age Gaz., June 6, 1913. Pp. 2.

As a result of the reduction of margin between income and outgo railroads generally in official classification territory are very rapidly ceasing to incur further capital expenditures.

————— *Arbitration of the firemen's wage controversy. IV, V.* Ry. Age Gaz., Apr. 4, 11, 1913. Pp. 2½.

Concludes the summary of the evidence given before the arbitration board.

————— *Are our railroads fairly treated?* Ry. Age Gaz., May 2, 1913. Pp. 4½.

Abstract of a discussion before the Economic Club of New York, by F. A. Delano, A. B. Garretson, B. F. Bush, W. Z. Ripley, and W. C. Brown. In general, the addresses emphasized the necessity of a more remunerative rate of returns to the railways.

Electrification progress in the United States. Elec. Ry. Journ., June 7, 1913. Pp. 4½.

The fireman's increased wages. Ry. Age Gaz., May 2, 1913.

P. 1.

The settlement has entrenched still further the principle that the brotherhoods shall authoritatively represent railway employees in such controversies.

Maintenance of equipment. II-IV. Ry. & Engg. Rev., May 3-17, 1913. Pp. 3.

An analysis of the expense of freight car maintenance per ton mile from 1902 to 1912, covering the leading railroads. In most cases, considerable increase is shown.

Proposed rate advances on eastern roads. Ry. Age Gaz., May 9, 1913. Pp. 1½.

Briefly outlines the causes (mainly wage increases) of the fall in net income since 1910, and approves the proposal of the eastern railroads that freight rates be advanced 5 per cent.

Railway valuation board of the interstate commerce commission. Engg. News, May 15, 1913.

Some disputed points in railway valuation. I-IV. Ry. Age Gaz., May 16, 23, 30, June 6, 1913. Pp. 3½.

A simple presentation of the problems that arise in connection with the right of way (I), investments from earnings (II), depreciation (III), and intangible values (IV).

Le matériel roulant. Journ. des Transports, Apr. 12, 1913.

P. 1.

A tabular presentation of the rolling stock of the five railway companies and the state railway administration.

Le réseau ferré de la Chine. Journ. des Transports, May 10, 1913. P. 1.

A table showing the various railways of China, dates of opening, length of mileage, terminal points and junctions.

Accounting

(Abstracts by John Bauer)

AYRES, M. V. *Accounting versus statistics.* Elec. Ry. Journ., May 3, 1913. Pp. 3.

The present classification of accounts for electric railways makes correct comparison of unit costs between different companies difficult. The kind of items entering into a given account vary greatly from one company to another. Reorganization is necessary to procure strict homogeneity of accounts according to best statistical standards.

BAUER, J. *The accounting of interest and discount on notes.* Journ. Account., Apr., May, 1913. Pp. 11, 10.

(1) An analysis and criticism of the customary interest account;
(2) suggested reconstruction on modern lines to serve especially the statistical needs of a business.

BURTON, F. G. *The limitations of an auditor.* Accountant, May 10, 1913. Pp. 6.

The auditor cannot be responsible for the correctness of stocktaking, but, by inquiry into items taken at random, and by comparison of totals, he can judge whether the methods employed were satisfactory and honest.

COLE, W. M.; CHURCH, A. H.; RICHARDS, W. B.; STERRETT, J. E. *The treatment of interest on manufacturing investment.* Journ. Account., May, 1913. Pp. 14.

A symposium on whether interest on investment should be included in the manufacturing cost of finished goods. The affirmative is upheld by Cole and Church, and the negative by Richards and Sterrett.

CUTFORTH, A. E. *The organization of an accountant's department.* Accountant, May 10, 1913. Pp. 7.

An outline of broad principles with illustrations drawn from railway accounting.

DICKSEE, L. R. *Some suggestions on stock accounts and stock-taking.* Accountant, May 3, 1913. Pp. 5.

Suggests how continuous stock or merchandise accounts may be kept even by retail dealers, with great advantage to the audit and to the control of the business.

GRAHAM, D. A. *The appraisal of water-works properties.* Engg. & Con., Apr. 9, 1913.

Approves cost of reproduction, less proper allowance for existing depreciation of a given property. Traces the steps in making such an appraisal.

HUNTER, J. *Cotton mill accounts.* Accountant, May 31, 1913. Pp. 4.

JACKSON, A. C.; SMITH, A.; KENT, W.; TOWNE, H. R. *Axioms concerning manufacturing costs.* Journ. Am. Soc. of Mech. Engrs., Apr., 1913. Pp. 8.

A discussion of a paper under the above title, by H. R. Towne, published in the same magazine, Dec., 1912.

JENKINSON, M. W. *Some notes on the audit of different businesses.* Accountant, Apr. 19, 1913. Pp. 14.

Covers the audit of banks, breweries, building societies, collieries, solicitors, trust and finance companies.

JENKINSON, M. W. *The audit of a public limited company.* Accountant, Apr. 5, 1912, 1913. Pp. 14, 8.

Considers the duties, procedure and report of the auditor.

KREIBEN, B. D. *Determination of the income rate of investments.* Journ. Account., May, 1913. Pp. 5.

Shows how income rate may be calculated by successive approximations, coupled with interpolation.

SCHOOLING, W. *Depreciation of investments and plant.* Accountant, Apr. 5, 1913. Pp. 6.

Favors the sinking fund method of allowing for depreciation because of the necessary time element involved in plant valuation.

SPARKS, J. B. *Electric railway costs.* Elec. Ry. Journ., June 14, 1913. Pp. 4.

Power costs should be separated from other transportation expenses. Provides for cost per unit of power delivered at the train, to facilitate comparisons between different electric systems, also between electric and steam operation.

SUFFERN, E. L.; NICHOLSON, J. L.; JOPLIN, J. R. *Treatment of interest on manufacturing investment.* Journ. Account., May, 1913. Pp. 7.

Interest on capital invested should be included in the cost of manufactured product, according to the first two writers, but not according to the last.

TOWNE, H. R. *Axioms concerning manufacturing costs.* Journ. Am. Soc. of Mech. Engrs., Dec., 1912. Pp. 13.

Presents twenty-three propositions of cost accounting, with an introductory analysis and discussion to each formal statement.

WHITTEN, R. H. *Depreciation and public service regulation.* Engg. News, May 8, 1913. Pp. 7.

The problem is whether in determining fair value for rate making in a public utility, a deduction should be made from cost (new) for accrued depreciation of plant though such depreciation does not interfere with present efficiency of operation. Discusses (not very clearly) four methods of approach to the problem. Favors that a deduction should be made, but the annual depreciation allowance should be based on uniform investment after the plant has reached average life conditions.

Arbitration of operating expense charges in Cleveland. Elec. Ry. Journ., May 24, 31, June 14, 1913. Pp. 5, 3, 7.

Summary of the proceedings before the arbitration board considering the differences between the Cleveland railways and the city in regard to the allowances per car mile for various operating expenses. The last number contains a summary of counsels' arguments at conclusion of the hearings.

List of uniform systems of accounts formulated by companies, associations and state commissions. Special Libraries, Apr., 1913. Pp. 4.

Compiled by the library of the New York Public Service Commission, First District, New York City, covering electricity, gas, railroads, telephones, transit, water, and power concerns.

Public Utilities

ARKWRIGHT, P. S. *The length of franchise.* Stone & Webster Pub. Serv. Journ., June, 1913.

GREDSTED, M. *Telegrafens Stilling i indenlandsk Samkvem.* Nat. Øk. Tids., Jan.-Feb., 1913. Pp. 18.

The state telegraph in Denmark finds the privately owned telephone

a hard competitor. The author favors monopoly of interurban telephone business.

MORTON, F. N. *Public utility references*. Special Libraries, Feb., 1913.

RANDOLPH, C. F. *Municipal ownership of public utilities*. Yale Law Journ., Mar., Apr., 1913.

VON SCHULTHESS, H. *American public utilities*. Rollins Mag., Apr., 1913.

————— *Final report on San Francisco*. Elec. Ry. Journ., May 10, 1913.

————— *Municipal railway line in Seattle*. Elec. Ry. Journ., Apr. 26, 1913.

————— *Report on street railway system of Kansas City*. Elec. Ry. Journ., Apr. 19, 1913.

————— *Street-railway valuation*. Engg. News, May 22, 1913.

————— *Two new state public-utility laws*. Engg. News, Apr. 10, 1913.

Corporations and Trusts

(Abstracts by M. H. Robinson)

ADAMS, B. *Collapse of capitalistic government*. Atlantic, Apr., 1913.

The progressive movement is a rebellion against capitalistic government, comparable with the industrial revolution and the economic changes brought about by the adoption of the present constitution. Our courts are open to serious criticism.

BACON, N. T. *The control of corporations*. Moody's Mag., Apr., 1913.

The control of corporations is to be achieved through better selection of directors and closer supervision of the directorate.

BAKER, J. N. *Regulation of industrial corporations*. Yale Law Journ., Feb., 1913.

KOEPPE, Fritz Kestner, *Der Organisationszwang. Eine Untersuchung über die Kämpfe zwischen Kartellen und Aussenseitern*. Jahrb. f. Nat. Oek., Mar., 1913.

A brief review of a significant work on the struggle between the independents and the trusts as illustrated by German experience.

MORAWETZ, V. *The power of Congress to enact incorporation laws and to regulate corporations*. Harvard Law Rev., June, 1913.

MUHSE, A. C. *The tobacco disintegration*. Pol. Sci. Quart., June, 1913.

A thorough and scholarly discussion of the plan of disintegration by one of the representatives of the Bureau of Corporations who assisted in its preparation.

ORTH, S. P. *Germany, England and the trusts*. World's Wk., Apr., 1913.

A popular article showing how Germany "cherishes" the trusts, while England "tolerates" them. In both countries the corporation is better regulated than in the United States.

PRINDLE, E. J. *The present condition of the patent law including recent and pending decisions of the Supreme Court of the United States and proposed patent legislation*. Journ. Am. Soc. of Mech. Engrs., Apr., 1913.

The author attributes all changes in methods of production since the days of Washington to the American patent law, and deploras any attempt to restrict the privileges of the inventor. The recent cases are briefly discussed.

SCHMIDT, E. *Das Leuchtölmonopol des deutschen Reiches*. Jahrb. f. Nat. Oek., Apr., 1913.

A detailed study of the Standard Oil Co. in Germany and the results of its policy.

VAIL, T. N. *Public utilities and public policy*. Atlantic, Mar., 1913.

A fair statement of the opportunities and obligations of public service companies, together with a defense of private management and public content.

ZELLER, J. *The Corn Products Refining Co.* Moody's Mag., May, 1913.

A brief resumé of the company's finances, calling especial attention to its heavy overcapitalization.

————— *The rights of patentees*. Nation, June 5, 1913.

Decision in Sanatogen case limits rights hitherto claimed by patentees in matter of fixing resale prices. Patent law should be amended by providing for the forfeiture of unused patents after two or three years.

Investments

BROOKMIRE, J. H. *Putting the cycle theory to work*. Moody's Mag., Mar., 1913.

CHAMBERLAIN, L. *Sinking fund bonds*. Moody's Mag., Feb., 1913.

GYSÆ. *Der "bucketshop"*. Die Bank, Apr., 1913.

LANSBURGH, A. *Die Zulassung zum Börsenhandel*. Die Bank, Mar., 1913.

LAVINGTON, F. *The social interest in speculation*. Econ. Journ., Mar., 1913.

LAWSON, T. W. *Stock gambledom*. Everybody's, Dec., 1912.

LEHFELDT, R. A. *The rate of interest on British and foreign investment*. Journ. Royal Stat. Soc., Jan., 1913.

SPICER, E. E. *The depreciation of gilt-edged securities*. Accountant, Feb. 8, 1913. Pp. 7.

Refers especially to English consols. Reasons given for the depreciation are: (1) excessive issues in recent years; (2) larger returns realized from other investments.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

BALLOT, H. *Les actions de travail; leur application pratique dans une ville industrielle*. Réf. Soc., Apr., 1913. Pp. 24.

The shares held by the workmen should be held individually and not collectively, and only during the period of employment. The city

of Troyes has decided to use certain funds to enable workmen to buy shares.

BARKMAN, H. *Staats- och kommunalarbeters s rst llning samt fragan om forhandlingsordning*. Ek. Tids., No. 3, 1913. Pp. 8.

A discussion of the special position of labor employed by the government, state, and local, and of how best to meet these problems.

BARNETT, G. E. *The dominance of the national union in American labor organization*. Quart. Journ. Econ., May, 1913. Pp. 26.

Shows the increasing control exercised since 1897 by the national union over the other forms of labor organization.

BOYLE, J. *The legal minimum wage*. Forum, May, 1913.

BRENTANO, L. *Ueber den Syndikalismus*. S ddeut. Monatshefte, Dec., 1912.

CHAPMAN, S. J. and ABBOTT, W. *The tendency of children to enter their fathers' trades*. Journ. Royal Statist. Soc., May, 1913. Pp. 6.

Based on 2,415 answers to a circular letter. The relative pull of the father's trade on his children in comparison with the pull of any other trade is found to be as three to one.

COOKE, M. L. *The spirit and social significance of scientific management*. Journ. Pol. Econ., June, 1913.

CORNELIUSSEN, C. *Die neueste Entwicklung des Syndikalismus*. Archiv f. Sozialwis., Jan., 1913.

DUPONT-FERRIER, G. *L'enseignement primaire   Paris*. Rev. Hebdomadaire, Mar. 29, 1913. Pp. 19.

Discusses the provision made by the city of Paris for teaching trades.

E. F. *Die Arbeitszeiten in der Grosseisenindustrie*. Soziale Praxis, June 5, 1913.

Interesting comment on the statistics of working time in the German iron industry. Increasing amount of overtime and of Sunday labor.

FAGAN, J. O. *Labor unions and the railroads*. Ry. Age Gaz., June 13, 1913. Pp. 3.

The unions have imposed inelastic and cramping rules upon the management of the railways.

FITCH, J. A. *The I. W. W., an outlaw organization*. Survey, June 7, 1913. Pp. 7.

The intense feeling against the I. W. W. is due partly to certain doctrines professed by that organization, notably sabotage and anti-patriotism, and partly to the intemperate and unauthorized expression of some of its leaders.

FLACK, H. E. *Workmen's compensation*. Am. Pol. Sci. Rev., May, 1913. Pp. 7.

Abstracts of recently enacted laws in Arizona, Illinois, Maryland, Massachusetts, and Michigan.

FREY, J. P. *The relationship of scientific management to labor*. Journ. Pol. Econ., May, 1913.

HACHIN, J. *Le droit des syndicats d'agir et d'intervenir en justice.* Mouv. Social, Apr. 15, 1913. Pp. 30.

An interesting discussion of the power of French associations, including trades-unions, to bring suits in the courts.

HAMPKE, T. *Denkschrift des deutschen Handwerks- und Gewerbekammertages betr. Abänderung des Handwerkerergesetzes vom 26. Juli, 1897.* Jahrb. f. Nat. Oek., Feb., 1913.

HARPER, S. A. *The law of procedure under the Illinois workmen's compensation act.* Ill. Law Rev., Mar., 1913.

HOYER, A. *Statsmagtens Indgriben i Arbejdsforholdene. I. Obligatorisk Voldgift.* Nat. ök. Tids., Mar.-Apr., 1913. Pp. 36.

Discusses New Zealand's system of compulsory arbitration in labor disputes. Does not believe that it can be successfully transplanted to other states under existing conditions.

HUBER-VALLEROUX. *Où en est la question de l'apprentissage?* Réf. Soc., June, 1913. Pp. 12.

HYDE, C. C. and WATSON, C. H. *The equities of non-resident alien dependents under workmen's compensation laws.* Ill. Law Rev., Feb., 1913.

The objections to workmen's compensation acts which discriminate against non-resident alien dependents are set forth in detail.

JONES, D. C. *An account of an inquiry into the extent of economic moral failure among certain types of regular workers.* Journ. Royal Stat. Soc., Apr., 1913. Pp. 14.

Based chiefly on the answers to a circular sent by the writer to a large number of employers. The returns indicate that women workers are more temperate but less honest than men. In twelve large companies employing 43,437 persons, the number of dismissals for some moral failing (dishonesty, intemperance, neglect of work, and irregularity) during a year was 1.55 per cent. Interesting differences in the rate of moral failure between skilled and unskilled workmen, between employees of large and of small firms, and between different occupations are indicated.

LANDE, D. *Zur Frage der fachlichen Ausbildung der Arbeiterinnen von sozialpolitischen Gesichtspunkten.* Ann. f. Soz. Pol. u. Gesetz., II, 5-6, 1913. Pp. 20.

A systematic discussion of the relation of trade schools to the employment of women.

MAHON, W. D. *Trade union fraternal benefits.* Am. Federationist, May, 1913. Pp. 3.

A statement of the kinds of benefits paid and the total sum so expended by each of forty national unions.

MILNER, B. B. *Fundamentals of wage payment.* Ry. Age Gaz., Apr. 25, 1913. Pp. 6.

With proper attention to the time element the differences between the various systems of wage payment are of minor importance.

MONTEMARTINI, G. *La statistica della disoccupazione e la rilevazione della domanda di lavoro.* Giorn. d'Econ., Mar., 1913. Pp. 14.

Theoretical and practical difficulties in the statistical measurement of unemployment.

NIELSON, A. *Den syndikalistiske Bevægelse*. Nat. Øk. Tids., Nov.-Dec., 1912. Pp. 18.

The author does not approve of the methods and immediate aims of the syndicalists, but he recognizes the value of the movement as a criticism of the present order and as furnishing new social ideals, revolutionary but thought-stimulating.

PAYEN, E. *L'hygiène et la sécurité des travailleurs: les nouvelles réglementations*. L'Econ. Franç., Apr. 5, 1913. Pp. 3.

Outlines the new French law for the protection of the workers against accident and unsanitary conditions.

RUBINOW, I. M. *The problem of unemployment*. Journ. Pol. Econ., Apr., 1913. Pp. 18.

A general review of the entire subject.

SCHWITTAU, G. *Der gesetzliche Schutz der Kinderarbeit*. Ann. f. Soz. Pol. u. Gesetz., II, 5-6, 1913. Pp. 12.

An interesting account of the history and present position of child-labor legislation in Russia.

STEWART, E. *Shorter hours for pulp and paper makers*. Am. Federationist, June, 1913. Pp. 2.

An argument in favor of the three-shift bill for paper workers which is pending in the Massachusetts legislature.

SYRUP. *Die gesetzliche Begrenzung der Arbeitszeit erwachsener männlicher Arbeiter unter besonderer Berücksichtigung der Grosseisen-industrie*. Archiv f. exakte Wirtschaftsforschung, No. 4, 1912.

THOMPSON, S. E. *Time-study and task work*. Journ. Pol. Econ., May, 1913.

TOUGARD DE BOISMILON, A. *Le syndicalisme féminin dans les industries textiles en Angleterre*. Mus. Soc., Mém. & Doc., May, 1913. Pp. 18.

The high wages of the women operatives have been due to the unions, which have been maintained and managed chiefly by the male operatives.

VALLEROUX, H. *Les actions de travail*. L'Econ. Franç., Apr. 12, 1913.

VAN DYKE, H. W. *Federal interference proposed*. Am. Employer, June, 1913. Pp. 7.

A review of the West Virginia coal strike, based chiefly on the report of the governor's commission.

WALKER, A. *Scientific management applied to commercial enterprises*. Journ. Pol. Econ., May, 1913.

WASHINGTON, B. T. *The negro and the labor unions*. Atlantic, June, 1913. Pp. 9.

WESTON, E. *Minimum wage for women plan*. Am. Employer, June, 1913. Pp. 6.

Argues that a minimum wage law would cause the replacement of women workers by men.

WESTON, E. *Some principles of the I. W. W.* Am. Employer, July, 1913. Pp. 6.

————— *Child labor and poverty.* Child Lab. Bull., May., 1913. Pp. 144.
A series of papers read at the Ninth National Conference on Child Labor, Mar. 13-17, 1913.

————— *The earnings and hours of labor of English railway servants.* Bull. Int. Ry. Cong., Mar., 1913.

————— *The industrial disputes investigation act, 1907. Review of proceedings for the six-year period and for year 1912-1913.* Lab. Gaz. (Ottawa), May, 1913. Pp. 17.

————— *Massachusetts workmen's compensation experience under its present law.* Am. Underwriter, Mar., 1913. Pp. 15.

Text of the Industrial Accidents Board's letter addressed to Governor Foss under date of February 6, 1913. Contains an interesting table showing for eight large industrial companies the ratios of compensation paid to the insurance premiums.

————— *Prison labor.* Ann. Am. Acad., Mar., 1913. Pp. 188.

Papers by public officials, trade-union leaders and experts in prison management on almost every phase of the problem.

————— *Reports on Little Falls dispute.* N. Y. Lab. Bull., Mar., 1913. Pp. 33.

Report of Board of Mediation and Arbitration on the negotiations for a settlement and a report of the Bureau of Labor Statistics on wages and the cost of living of the textile operatives concerned.

————— *Mr. Sargeant on proposed nine-hours-in-eleven bill.* Elec. Ry. Journ., Apr. 5, 1913. P. 1.

Contents that the proposed Massachusetts legislation further regulating the working hours of motormen and conductors would mean a large increase in the number of men working a few trips.

————— *Unemployment insurance.* Board of Trade Lab. Gaz., Feb., 1913. Pp. 3.

Official statistics of the English unemployment insurance scheme. On Feb. 1, 1913, 2,297,326 persons were insured.

————— *Work of the board of trade labour exchanges in 1912.* Board of Trade Lab. Gaz., Feb., 1913. Pp. 4.

————— *L'assistance pour chômeurs.* Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, Jan.-Mar., 1913. Pp. 390.

A series of articles on the relief of the unemployed in various countries. W. M. Leiserson writes on "Relief works in the United States," and C. R. Henderson on "Unemployment and unemployment relief in India."

————— *Le mouvement syndical en Belgique: les organismes de propagande et de centralisation.* L'Econ. Franç., Mar. 22, 1913. Pp. 3.

Prices and Cost of Living

(Abstracts by Henry J. Harris)

BENINI, R. *L'azione recente dell'oro sui generali delle merci*. Giorn. d. Econ., Nov.-Dec., 1912. Pp. 31.

Gold production is chiefly responsible for higher prices. Guyot and Luzzatti have lately combated this view, but the difference of opinion rests on misunderstandings which can be explained away.

BOLDRINI, M. *Indici di benessere nelle varie classi di lavoratori*. Riv. Ital. d. Sociol., Mar.-Apr., 1913. Pp. 12.

A study in the method of analyzing workmen's budgets, with reference to the proportion of income spent on food. There is a criticism of the procedure of Del Vecchio.

BREHMER, A. *Zur Lebensmittelpreisstatistik*. Deut. Stat. Zentralblatt, June-July, 1913. Pp. 3.

A discussion by Brehmer and Busch of the methods of collecting cost-of-living data.

GURADZEL, H. *Die Brotpreise in Berlin im Jahre 1912*. Jahrb. f. Nat. Oek., June, 1913. Pp. 4.

Prices of rye and wheat bread and flour in Berlin in the years 1886 to 1912. Rye bread in 1912 was 6.60 per cent higher than in 1911; wheat bread was 2.27 per cent higher.

KING, C. L. *Philadelphia's high cost of living program*. Nat. Munic. Rev., Apr., 1913. Pp. 5.

Describes the cost elements of bringing food into Philadelphia. Urges improvement of transportation facilities.

PACKE, C. E. *Dear food, cheap consols and labour unrest*. Bankers' Mag. (London), Apr., 1913. Pp. 8.

Fourth and last of a series of articles advocating control of changes in price levels by banking or government authorities.

SJOSTRAND, E. *Varuprisnivans "stabilisering."* Ek. Tids., No. 12, 1912. Pp. 7.

Discusses the desirability of a stable price level and possible means of securing it.

SPANN, O. *Theorie der Preisverschiebung: Ein Beitrag zur Erklärung der Teuerungen*. Zeitschr. f. Volkswirtsch., 2-3, 1913. Pp. 62.

Increases in prices are due to greater prosperity of nations. Increases would be reduced if greater continuity and regularity of production could be instituted.

— *Cost of living in Nova Scotia*. Cons. & Trade Rpts., July 8, 1913. P. 1.

Writer estimates cost of living for a workingman's family of six persons at \$910.29 per annum.

— *The cost of living*. Ann. Am. Acad., July, 1913.

Papers read at the annual meeting of the academy, April 4-5, 1914. Among these are to be noted: S. N. Patten, "The standardization of family life"; C. P. Gilman, "The waste of private housekeeping"; Mrs. F. A. Pattison, "Scientific management in home-making"; L. B.

Moore, "The cost of living for a wage-earner's family in New York city"; M. F. Byington, "Some unconsidered elements in household expenditure"; M. B. Bruère, "Utilization of the family income"; J. Heath, "Work of the housewives league"; I. M. Tarbell, "The cost of living and household management"; Irving Fisher, "The monetary side of the cost of living problem"; C. C. Miller, "Municipal markets in their relation to the cost of living"; E. Black, "Communal benefits from the public control of terminal markets"; M. E. Pennington, "Relation of cold storage to the food supply and the consumer"; A. R. E. Pinchot, "The cost of private monopoly to public and wage-earner"; S. H. Barker, "Burdens of false capitalization"; C. L. King, "Can the cost of distributing food products be reduced"; A. Shaw, "Co-operation as a means of reducing the cost of living"; H. W. Hess, "Advertising and the high cost of living"; E. P. Wheeler, "The increased cost of production"; E. E. Smith, "The farmer's share in the high cost of living"; M. Van Rensselaer, "The housekeeper and the cost of living."

Prices and cost of living in Canada during 1912. Lab. Gaz. (Ottawa), Apr., 1913. Pp. 17.

Summary of a special report by the Canadian department of labor. The index numbers of the department show that in 1912 wholesale prices were 6.5 per cent higher than in 1911, while retail prices were 5.8 per cent higher. If the commodities comprising the articles in the wage-earner's budget are considered, the increase was probably over 9 per cent. A weekly budget which would have cost \$12.24 in 1910, cost \$12.89 in 1911 and \$13.63 in 1912.

Coste de la vida del obrero. Boletín del Inst. de Ref. Soc., Oct., 1912. Pp. 23.

Tables showing prices of articles consumed by workmen, during the period Oct., 1911, to Mar., 1912.

Livsmedelakostnader i Stockholm 1904-1912. Sociala Meddelanden, No. 3, 1913. P. 1.

Using the budget investigation of 1907-8 as the basis for calculating the consumption of wage-earners families, the index number computed by the Swedish bureau of social statistics was 1000 in 1904, 1134 in 1910, 1180 in 1911, and 1203 in 1912.

Money, Credit, and Banking

BRISMAN, S. *Förestår ett omslag i konjunkturerna?* Ek. Tids., No. 4, 1913. Pp. 9.

The author fears the possibility of a financial crisis in the near future.

BROOKMIRE, J. H. *Financial forecasting. IV. Banking barometers.* Moody's Mag., Apr., 1913.

CERT, E. M. G. *The economics of banking profits.* Journ. Inst. Bankers, May, 1913.

CHARLES, P. *Une banque d'état russe pour le crédit local.* Rev. Sci. Legis. Finan., Jan.-Mar., 1913.

DE COTTICCE-SCHMIDT, A. *Kanadische Grossbank-Politik*. Die Bank, May, 1913.

D. D. *Smasedelfragen i Tyskland*. Ek. Tids., No. 2, 1913. Pp. 5.

Discusses the economic aspects of the recently increasing use of small denomination bank notes as a circulating medium.

DAVIDSON, D. *Riksbankens sedelutgifningsrätt*. Ek. Tids., No. 1, 1913. Pp. 14.

Discusses Swedish central bank note issue and proposed changes. Believes that one of a central bank's most important functions is to maintain the stability of the monetary standard.

DAVIDSON, D. *Irving Fishers Förslag att reglera penningens köpkraft*. Ek. Tids., No. 3, 1913. Pp. 20.

A criticism of Irving Fisher's plan to make the purchasing power of money constant.

DEL VECCHIO, G. *Le variazioni periodiche dello sconto*. Giron. d. Econ., Apr., 1913. Pp. 65.

The causes and significance of seasonal and other variations in the rate of discount, as occurring in various countries.

ESCHWEGE, L. *Kaiserdamm 44*. Die Bank, May, 1913.

FISHER, W. C. *The tabular standard in Massachusetts history*. Quart. Journ. Econ., May, 1913.

FISKE, A. K. *Currency reform*. No. Am. Rev., May, 1913.

GIBSON, A. H. *Growth of leading savings banks*. Savings Bank of Glasgow. Bankers' Mag. (London), June, 1913.

HALE, R. S. *Depreciation in its relations to investments, earnings and value*. Engg. Mag., May, 1913.

HERRICK, M. T. *The farmer and finance*. Atlantic, Feb., 1913. Pp. 8.

HOGAN, J. V. *Banking management in Europe*. Moody's Mag., May, 1913.

INNES, A. M. *What is money?* Banking Law Journ., May, 1913.

LANSBURGH, A. *Praktische Geldpolitik*. I. *Die Schwankungen des Geldwerts*. Die Bank, May, 1913.

LANSBURGH, A. *Die Landwirtschaftsbank für Südwestafrika*. Die Bank, May, 1913.

LEHFELDT, R. A. *The rate of interest on investments in 1912*. Journ. Royal Stat. Soc., March, 1913.

LEVY, R.-G. *La monnaie*. Rev. Intern. du Com., Mar., 1913.

NIELSEN, A. *Banker og Sparekasser*. Nat. ök. Tids., Mar.-Apr., 1913. Pp. 11.

A theoretical discussion of commercial banks and savings banks based mainly on the distinction between the former as credit institutions for entrepreneurs and the latter as institutions for salaried persons.

NOYES, A. D. *The money trust*. Atlantic, May, 1913.

- PAGET, J. *Gilbart lectures, 1913; I, II and III.* Journ. Inst. Bankers, Apr., 1913.
- PATTERSON, E. M. *Certain changes in New York's position as financial center.* Journ. Pol. Econ., June, 1913. Pp. 8.
- PAYEN, E. *Les associations coopératives de crédit.* L'Econ. Franç., May 3, 1913.
- DE PENHA-GARCIA. *La nouvelle monnaie portugaise.* Rev. Sci. Pol., Mar.-Apr., 1913.
- RAFFALOVICH, A. *La banque d'Allemagne en 1912.* L'Econ. Franç., Apr. 19, 1913.
- RALFE, P. G. *Banking and commerce in a "home rule" island.* Scottish Bankers Mag., Apr., 1913.
- ROLLINS, M. *The evolution of the investment banker.* Rollins Mag., Apr., 1913.
- TARBELL, I. M. *Hunt for a money trust.* American, May, 1913.
- TAUSSIG, F. W. *The plan for a compensated dollar.* Quart. Journ. Econ., May, 1913.
- VARGA, E. *Goldproduktion und Teuerung.* Neue Zeit, Jan. 17, 1913.
- VOSE, E. N. *Does the American farmer really pay eight and a half per cent per annum for his mortgage?* Bankers' Mag., Apr., 1913.
- WARMING, J. *Lovgivning om Banker og Sparekasser.* Nat. ök. Tids., Jan.-Feb., 1913. Pp. 44.
- A discussion of Danish banks and banking conditions, and particularly of two bills before the rigsdag aiming at a greater security for depositors.
- WICKSEL, K. *Penningsvärdets reglerande.* Ek. Tids., No. 4, 1913. Pp. 8.
- Believes that a rational regulation of money value will be possible only when gold ceases to be the measure of value and its place is taken by properly regulated issue of bank notes and banking methods.
- WOOD, R. H. *The branch bank system in Australia and its value and suitability to the needs of the community.* Journ. Inst. Bankers New South Wales, Jan., 1913.
- ZUCKERLANDL, R. *Das neue Privilegium der Oesterreichisch-ungarischen Bank.* Jahrb. f. Nat. Oek., Jan., 1913.
- *Coöperative agricultural credit in India.* Mo. Bull. Econ. & Soc. Intelligence, Mar., 1913.
- *The mortgage loans of the Prussian savings banks.* Mo. Bull. Econ. & Soc. Intelligence, Feb., 1913.

Public Finance

(Abstracts by C. C. Williamson)

- BALLANTINE, H. W. *Our grotesque inheritance laws.* Green Bag, June, 1913. Pp. 5.

The dean of the law school of the University of Montana shows the need of a more rational regulation of inheritances, and suggests, by way of example, that we may "have to resort to an annihilative taxation of incomes, taking over all incomes above \$100,000."

DE BIERMONT, P. *L'octroi de Paris. Le passé. Le présent. L'avenir.* Journ. des Econ., Apr., 1913. Pp. 30.

Condemns the injustice, inequality, and inexpediency of the octroi, an anachronism that is bound to disappear.

BLUM, J. *Budgetrecht und Finanzpraxis. Ihre Gegenwartsaufgaben.* Zeitschr. f. Politik, V, Heft 2-3, 1913. Pp. 137.

BOYLE, J. E. *County budgets: economy and efficiency in expenditures.* Ann. Am. Acad., May, 1913. Pp. 14.

The present situation of county finances and accounting is bad. Commission government for counties is advocated as a remedy, together with compulsory uniform accounting, which is a prerequisite for scientific budget making. The article gives a useful resumé of existing laws on uniform accounting.

BRIEFS, G. *Die organisatorische und wirtschaftliche Entwicklung im deutschen Brennereigewerbe unter dem Einflusse der Reichsbranntweinsteuergesetzgebung.* Jahrb. f. Nat. Oek., Jan., 1913. Pp. 27.

BRINDLEY, J. E. *State supervision of county assessment and taxation.* Ann. Am. Acad., May, 1913. Pp. 14.

Changed economic conditions have made necessary a greater centralization of administrative machinery. Already some plan of state review or equalization is found in thirty-eight of the forty-eight states. The present tendency of tax reform is to increase the authority of state officials, ex-officio bodies being replaced by permanent commissions or commissioners.

BRUERE, H. *The biggest municipal debt in the world.* Real Estate Record & Builders' Guide, May 10, 1913. Pp. 2.

Gross funded debt of New York city exceeds a billion. Borrowing limit virtually reached. New methods of financing public works must be found.

BULL, A. J. *A critical examination of the incidence of the various forms of taxation, with especial reference to their influence upon industrial conditions.* Journ. Inst. Bankers, June, 1913. Pp. 20.

A prize essay of the Institute of Bankers.

CHASE, H. S. *The national budget on its expenditure side.* Journ. Account., June, 1913. Pp. 14.

An outline of the federal budget problem by a member of the President's Commission on Economy and Efficiency.

CLARK, J. B. *Proposed surtax.* Real Estate Record & Builders' Guide, Feb., 1913. Pp. 4.

CLEVELAND, F. A. *What is involved in the making of a national budget.* Journ. Account., May, 1913. Pp. 16.

COXER, F. W. *Administration of local taxation in Ohio*. Ann. Am. Acad., May, 1913. Pp. 17.

Devoted to the general property tax, its history and administration, and the reform movements and legislation of recent years.

COX-SINCLAIR, E. E. and HYNES, T. *Some problems in land values*. Law Mag. & Rev., May, 1913. Pp. 13.

DIOMIDIS. *Le budget grec de 1913*. Le Mouv. Econ., Apr. 1, 1913. Pp. 5.

A summary of a statement made by the Minister of Finance on submitting the 1913 budget to the Chamber.

DOBROVICI, G. M. *Historique de la dette publique en Roumaine*. Mouv. Econ., Apr. 1, 1913. Pp. 13.

DURAND, C. *Le budget russe de 1913*. L'Econ. Franç., May 17, 1913. Pp. 3.

FOY, S. *The death duties as a socialist agency*. Socialist Rev., Apr., 1913. Pp. 6.

Proposes that the state should gain control over industry by requiring the payment of inheritance taxes in kind and retaining all property so received.

FRICKE, A. *Die Ausgaben für die offene Armenpflege in den deutschen Grossstädten (1900-1910)*. Zeitschr. f. d. Armenwesen, Apr., 1913. Pp. 15.

FROST, J. E. *Taxation and finance*. Pacific Municipalities, June, 1913. Pp. 5.

GEISSER, A. *Il mercato del credito ed i prestiti municipali*. Rif. Soc., Feb.-Mar., 1913. Pp. 19.

GERLING. *Systeme und Technik der Kommunalen Schuldbücher*. Ann. deut. Reichs, Mar. 15, 1913. Pp. 10.

GETTEMY, C. F. *The function of the state in relation to statistics of municipal finances*. Quart. Pubs. Am. Stat. Assoc., Mar., 1913. Pp. 13.

Urges the need of uniform and adequate municipal accounting systems, under state supervision, as a means of securing the statistical data necessary for efficiency in municipal government.

GOODNOW, F. J. *The nature of tax exemptions*. Columbia Law Rev., Feb., 1913. Pp. 17.

A re-examination of the decisions of the United States Supreme Court on tax exemptions in the light of its decision in the case of *Choate v. Trapp*, 224 U. S. 665 (1912). This is the first case which has "intimated that a repeal of a tax exemption is a taking of property without due process of law contrary to the fifth amendment."

GRAF. *Deutsche Luxussteuern*. Ann. deut. Reichs, Apr., 1913. Pp. 11.

GUYOT, Y. *Les dépenses militaires en Europe*. Journ. des Econ., Apr., 1913. Pp. 22.

The total military expenditures of the six great European powers increased 128 per cent from 1883 to 1912; the Balkan war threatens to accelerate the rate of growth of this burden which is already crushing Europe's productive capacity.

HAYAS, E. *Das ungarische Einkommensteuergesetz*. Blätter f. Vergleich. Rechtswis., May, 1913. Pp. 2.

A supplement to an article published in the same journal in 1907, discussing the proposed income tax. Although enacted in 1909, the law has not gone into effect until 1913. This article shows the modification made while the act was under consideration.

JEZE, G. *Les méthodes budgétaires. Le contenu du budget.* Rev. Sci. Legis. Finan., Jan.-Mar., 1913. Pp. 30.

A review of current discussion of problems of budgetary practice in England, Belgium, Switzerland, France, and the United States. The budget type found in the United States is descended from the English, though it has deviated so far from the English model as to constitute a special type.

KLEINDINST, J. T. *Die deutschen Kriegsanleihen in den Jahren 1870 und 1871.* Ann. deut. Reichs., Jahrg. 46, Heft 4, 1913. Pp. 36.

To be continued.

KLUPPEL, L. *Die Beamten der Arragonischen Hof- und Zentralfinanzverwaltung am Ausgange des 13. Jahrhunderts.* Viert. f. Soz. u. Wirtsch. Gesch., XI, 1-2, 1913. Pp. 44.

LEORY-BEAULIEU, P. *Politique et finances chinoises.* L'Econ. Franç., May 17, 1913. Pp. 2.

LEORY-BEAULIEU, P. *Le prochain grand emprunt français: examen du montant présumé de l'emprunt et du type à adopter.* L'Econ. Franç., May 24, 1913. Pp. 3.

LEORY-BEAULIEU, P. *Les projets d'impôts nouveaux.* L'Econ. Franç., May 31, June 7, 1913. Pp. 3, 3.

LEORY-BEAULIEU, P. *Le Sénat et le budget.* L'Econ. Franç., Apr. 12, 1913. Pp. 3.

Harshly criticises the Senate for failing to reduce the expenditure side of the budget.

LEORY-BEAULIEU, P. *La situation financière et les circonstances nouvelles.* L'Econ. Franç., May 10, 1913. Pp. 2.

The problem of curtailing excessive expenditures.

LEVY, G. *L'administration de la dette ottomane.* Mouv. Soc., Mar.-Apr., 1913. Pp. 4.

LINDARS, F. W. *The segregated budget as applied to municipal engineering work.* Proc. Municipal Engineers of City of N. Y. for 1912. Pp. 33.

A useful paper advocating the segregated and functionalized municipal budget.

LUSTGARTEN, W. *Raising revenue for the city of New York.* Single Tax Rev., Jan.-Feb., 1913. Pp. 5.

LUZZATTO, G. *Le finanze di un castello nel sec. XIII.* Viert. Soz. und Wirtsch. Gesch., XI, 1-2, 1913. Pp. 84.

MACLER. *Le budget des chemins de fer de l'état.* Journ. des Econ., Jan., 1913. Pp. 14.

MAGNAN, L. J. *Les douanes françaises.* Rev. Intern. du Com., Mar., 1913. Pp. 11.

MARTIN, G. *La surintendance du pouquet et les opérations de crédit public.* Rev. d'Hist. Econ. et Soc., 1913. No. 1. Pp. 45.

A study in French finance of the seventeenth century.

MEURIOT, P. *Quinze ans d' "income tax."* Journ. Soc. Statist., Apr., 1913. Pp. 16.

A detailed study of the English income tax, schedule by schedule, for the years 1896 to 1911. An enormous growth in national income is revealed, showing the falsity of the contention of the tariff reformers that free trade is ruining England. Revenue from the income tax has grown even faster than the income assessed, the latter having increased 51.6 per cent in the period under review, while income tax receipts increased 153 per cent.

MURRAY, R. A. *Intorno alla nozione dei bisogni pubblici.* Giorn. d. Econ., Mar., 1913. Pp. 4.

NEWMAN, J. R. P. *The new land taxes and their results. The bursting of the bubble.* Empire Rev., June, 1913. Pp. 5.

OWEN, M. *Public ownership and the increase of taxation in Great Britain.* Concerning Municipal Ownership, July, 1913. Pp. 5.

PAWLOWSKI, A. *La situation économique et financière de l'Italie.* Journ. des Econ., Apr. 15, 1913. Pp. 18.

REINHARD, O. *Die Zehntablösung in Württemberg.* Zeitschr. f. d. ges. Staatsw., Jahrg. 69, Heft 2, 1913. Pp. 58.

RIZZI, L. *La municipalisation des services publics in Italie.* Réf. Soc., Jan., 1913. Pp. 14.

ROY, G. *La taxe vicinale.* Rev. Gén. d'Admin., Apr.-Mar., 1913. Pp. 31.

TORNEBLADH, I. *Om taxering af jordbrugsfastiget i Särskilda Brukningsdelar m.m.* Ek. Tids., No. 1, 1913. Pp. 5.

An explanation and criticism of parts of recent Swedish laws as to taxation of certain forms of real property.

TRIAS, J. DED. *L'impôt sur les droits réels dans la législation espagnole au point de vue international.* Rev. de Droit Intern. Privé et de Droit Penal Intern., Jan.-Feb.-Mar., 1913. Pp. 7.

VALEGEAS, J. *Le virement de banque et le mandat—contributions pour le paiement des droits universitaires.* Rev. Gén. d'Admin., Jan., 1913. Pp. 15.

VOGEL, H. W. *A history of the taxation of real estate and the tax maps of the city of New York.* Proc. Municipal Engineers of City of N. Y. for 1912. Pp. 35.

VOEYS, A. I. *The regulation and taxation of insurance.* Case and Comment, June, 1913. Pp. 5.

WILLIAMS, W. M. J. *The budget for 1913-14.* Contemp. Rev., June, 1913.

————— *China's indebtedness.* Journ. Am. Asiatic Assoc., Apr., 1913. Pp. 4.

A reprint from the "North China Daily News."

————— *An increment tax would stop speculation. If real estate should*

fail them, where could thrifty folk invest their savings? A long chain of evils would attend a surtax. Real Estate Record & Builder's Guide, Apr., 1913. P. 1.

Methods of income tax collection. Mo. Bull. N. Y. Chamb. Comm., June, 1913. Pp. 5.

A report by Mr. Frank A. Vanderlip, chairman of the committee on finance and currency of the chamber of commerce of the state of New York, pointing out the hardships which would result from collecting the proposed federal income tax by the method of "deduction at the source."

Taxes in Japan. Japan Finan. and Econ. Mo., Mar., 1913. Pp. 3.

Die Leistungen der Gemeinden an Staatssteuern und Umlogen in den Jahren 1908-1910. Zeitschr. d. K. Bayerischen Statistischen Landesamts., Jahrg. 45, Heft. 2, 1913. Pp. 202.

Der preussische Etatsentwurf für 1913. Verwaltung und Statistik., Apr., 1913. Pp. 4.

Tariffs and Reciprocity

(Abstracts by Henry R. Mussey)

BALLOU, S. *The tariff and the price of sugar.* Moody's Mag., May, 1913. Pp. 5.

A clear explanation of the course of sugar prices in recent years, showing the importance of free raw sugar to the seaboard refiners in their intensifying struggle with the beet sugar men.

BLAKEY, R. G. *American beet sugar and the tariff.* Independent, May 29, 1913. Pp. 5.

Favors a gradual removal of the sugar duties, extending over a period of eight or ten years.

BLAKEY, R. G. *Beet sugar and the tariff.* Journ. Pol. Econ., June, 1913. Pp. 15.

Argues that the enactment of the proposed bill would probably destroy a large part of our beet sugar industry. While favoring reduction, questions whether it ought not to be spread over a longer period.

BLAKEY, R. G. *The proposed sugar tariff.* Pol. Sci. Quart., June, 1913. Pp. 19.

A statement of the forces working for and against free sugar. A careful and dispassionate estimate of the probable effects of the proposed law on prices, consumption, production and marketing throughout the world.

BRETT, G. P. *Tariff reduction from the standpoint of the business man.* Outlook, May 17, 1913. Pp. 3.

The proposed reduction of the tariff will reduce prices somewhat, cut extravagant and unnecessary expenses of management and selling, and thus improve the distribution of wealth and increase the soundness of social life.

CABIATI, A. *L'istituto cotoniero italiano e la crisi*. Rif. Soc., Apr., 1913. Pp. 59.

A survey of the recent history of cotton manufacturing in Italy, concluding with tables showing the financial position of the leading firms. The textile crisis is not to be met by a protective tariff.

GUYOT, Y. *La revision du tarif des Etats-Unis*. Journ. des Econ., May, 1913. Pp. 15.

An approving article giving the setting and the main features of our proposed new tariff.

HECKSCHER, E. F. *Tullpolitik och trustväsen*. Ek. Tids., No. 2, 1913. Pp. 43-71.

A theoretical discussion of the relation between tariff and trusts with special reference to the proposed reduction of duties on sugar in Sweden.

HOLLANDER, J. W. *Der deutsche Zolltariff von 1902*. Jahrb. f. Gesetzgebung, Verwaltung u. Volkswirtschaft, 37 Jahrg., 2 Heft, 1913. Pp. 29.

A continuation from the preceding number of the "Jahrbuch." Deals with the fall of Caprivi, the administration of Hohenlohe, and the accession of v. Bülow. A detailed study.

LAUT, A. C. *Save the citrus groves*. Sunset Mag., Apr., 1913. Pp. 14.

A somewhat lurid account of the efforts of the "Italian lemon trust" to get the duty on lemons removed, with an argument to show the benefits consumers have received from the activities of the California Fruit Exchange.

LONGWORTH, N. *The democratic tariff bill*. Outlook, May 13, 1913. Pp. 3.

Criticizes the Underwood bill as representing purely political trading, and argues for a permanent tariff commission.

MUSSEY, H. R. *The duty of the democrats*. Independent, Mar. 27, 1913. Pp. 6.

A discussion of what can be done in tariff reduction without serious injury to business, and a statement of the probable effects on prices and production.

DE NOUVION, G. *Protectionnisme et tuberculose*. Journ. des Econ., May, 1913. Pp. 21.

Alcoholism is the great cause of tuberculosis; insufficient food the cause of alcoholism; high price the cause of insufficient food; protection the cause of high price.

PAGE, T. W. *Our wool duties*. No. Am. Rev., Apr., 1913.

PAYEN, E. *Le régime douanier des colonies françaises*. Rev. Econ. Intern., May, 1913. Pp. 19.

The actual customs system of the French colonies, the criticism of that system, the reforms that have been suggested and the actual proposals for change submitted to the chambers by the minister for colonies.

STONE, N. I. *Our tariff "schedule K."* Century, May, 1913. Pp. 9.

A fierce attack on Schedule K, with heavy guns from the Tariff

Board armory. The duties are highly burdensome to the consumer, unfair to the woolen manufacturer, needless to the progressive wool grower, and useful only to the capitalist worsted manufacturer.

TAUSSIG, F. W. *Industries worth having*. Atlantic, May, 1913. Pp. 10.

A semi-popular, clear exposition of the doctrine of comparative costs, arguing against the delusion that a country should undertake to develop every possible industry.

TRAUTSCHOLD, R. *The tariff and our foreign trade*. Moody's Mag., June, 1913. Pp. 6.

A statistical examination of the total of our imports and exports, and a comparison of their fluctuations with changes in tariff policy and other influencing forces. The writer's theory is that prosperity depends in large degree on the volume of foreign trade.

TURNER, W. *What might have been: a fiscal puzzle*. West. Rev., Apr., 1913. Pp. 11.

A comparison of the progress of Belgian and Spanish trade during ten years, and a forecast of American trade expansion under lower duties.

————— *Eighth annual conference of the Tariff Reform League*. Mo. Notes on Tariff Reform, Apr., 1913.

The new tariff. Journ. Pol. Econ., May, 1913. Pp. 9.

A statement of the contents of the Underwood bill, schedule by schedule.

————— *Sentiment for free port*. Greater N. Y., June 2, 1913.

————— *Monthly Notes on Tariff Reform*, May, 1913.

Contains "India and imperial preference" (pp. 3); "Tariff reform for India" (pp. 6); "Tariff reform in Parliament" (pp. 9).

————— *Per la costituzione di una "Lega Antiprotezionista."* Ref. Soc., Apr., 1913. Pp. 6.

A proposal signed by leading Italian free-traders for the establishment of an "Anti-protectionist League" which, by opposing tariffs, should reduce the cost of living in Europe.

Insurance and Pensions

ABEL. *Mechanische Gewinnbeteiligungssysteme in der Lebensversicherung*. Versicherungs-Wissenschaft, May, 1913.

BELLOM, M. *L'assurance contre le chômage par la liberté: quelques exemples de l'étranger*. L'Econ. Franç., May 3, 1913.

BELLOM, M. *L'assurance par l'état et l'assurance privée, d'après l'expérience néo-zélandaise*. L'Econ. Franç., Mar. 29, 1913.

DANIEL, H. *Sygeforsikringen i Europa*. Nat. Øk. Tids., Mar.-Apr., 1913. Pp. 4.

Sickness insurance in Europe discussed—compulsory and voluntary. In Denmark, 40 per cent of the population over 15 are insured.

ELPERTING. *Die Verwandtenuausschlussklausel und Verwandtenregressklausel in der Haftpflichtversicherung*. Versicherungs-Wissenschaft, May, 1913.

FEILCHENFELD. *Ueber Zuckerfestigkeit und ihre Prüfung in der Lebensversicherung.* Versicherungs-Wissenschaft, May, 1913.

GRAUER. *Treu und Glauben im Versicherungsverkehr.* Versicherungs-Wissenschaft, May, 1913.

JEEZ, G. *Le monopole public des assurances en Uruguay.* Rev. Sci. Legis. Finan., Jan.-Mar., 1913.

JOHNSON, S. *The health and medical treatment of the uninsured.* Journ. Royal Stat. Soc., Mar., 1913.

LEE, P. R. *The Massachusetts report on the relief of widows.* Survey, Apr. 26, 1913.

MASON, E. F. *Municipal pensions.* Nat. Munic. Rev., Apr., 1913.

RUBINOW, I. M. *Subsidized unemployment insurance.* Journ. Pol. Econ., May, 1913.

SHARPE, D. R. *The insurance act and voluntary aid.* Charity Organ. Rev., May, 1913.

THORSON, C. *De Danske Livsforsikringselskabers Aktiver.* Nat. ök. Tids., Mar.-Apr., 1913. Pp. 24.

An analysis of the assets of Danish life insurance companies.

THORSON, C. *Statsmonopoliseringen af Livsforsikringsvirksomheden i Italien.* Nat. ök. Tids., Nov.-Dec., 1912. Pp. 16.

A discussion of state monopolization of life insurance in Italy under the law of April 22, 1912.

TRAP, C. *De nye svenske og norske Kommissionsforslag om en Invalids- og Alderdomsforsikring.* Nat. ök. Tids., Mar.-Apr., 1913. Pp. 17.

A critical examination of the invalid and old-age insurance plans proposed by special commission in Norway and Sweden.

VUOLI, R. *L'assicurazione obbligatoria nei lavori agricoli.* Riv. Intern., May, 1913. Pp. 22.

The moral basis of compulsory insurance against accidents with special reference to the position of agricultural laborers.

WHITING, F. J. *The German prototype of American compulsory insurance.* Stone & Webster Pub. Serv. Journ., May, 1913.

WICKSEL, K. *Alderdomsförsäkringskommitténs betänkande.* Ek. Tids., No. 12, 1912. Pp. 25.

A criticism of the report recently published by the Swedish Old-Age Pension Committee with whose conclusions and recommendations the author is not altogether in agreement.

————— *Forestry insurance in France.* Mo. Bull. Econ. & Soc. Intelligence, Mar., 1913.

————— *The national pension fund (France).* Mo. Bull. Econ. & Soc. Intelligence, Feb., 1913.

Population and Migration

(Abstracts by William B. Bailey)

JENSEN, A. *Den samlede Virkning Af Dødelighedens og Fødselshyppighedens Aftagen*. Nat. øk. Tids., Mar.-Apr., 1913. Pp. 10.

A study of the effects of the decreasing birth and death-rates. The author does not believe that national vitality and economic productiveness is likely to continue with a decreasing death-rate.

HANSON, S. *Om Raceforbedring*. Nat. øk. Tids., Jan.-Feb., 1913. Pp. 90.

A lecture on eugenics. Not in favor of a very marked encroachment on personal liberty.

MEURIOUX, P. *La population étrangère en France (1851-1911)*. Journ. Soc. Statist., Dec., 1912.

SAVORGHAN, F. *Il fattore confessionale nella scelta matrimoniale*. Riv. Ital. d. Sociol., Mar.-Apr., 1913. Pp. 30.

A study of marriage by religious affiliation based on figures of various countries. Marriage of Jew with Jew is exceptionally frequent.

WELTON, T. A. *Note on urban and rural variations according to the English census of 1911*. Journ. Royal Statist. Soc., Feb., 1913. Pp. 13.

In several of the largest cities of England there is a tendency toward loss of population by migration. The loss of the rural districts by migration is apparently considerably retarded.

————— *Den aftagende Tuberkulose-Dødelighed*. Nat. øk. Tids., Nov.-Dec., 1912. Pp. 2.

According to the official report of Dr. J. Carlsen of the medical statistics office of the Danish health department, there has been a marked decline in tuberculosis mortality in Denmark from 1890 to 1909.

————— *Faran af för lag nativitet*. Ek. Tids., No. 3, 1913. Pp. 2.

The danger of too low a birth-rate as shown by the estimated future populations up to 1948, of France, Germany, and Russia.

Pauperism and Charities

(Abstracts by Frank D. Watson)

HARRIS, E. F. *Charity functions of the Pennsylvania county*. Ann. Am. Acad., May, 1913.

A study of the evolutionary process by which the functions of the Pennsylvania county have changed from the simple duties of caring for all classes of dependents as paupers to the complicated machinery now existing.

LEPPINGTON, C. H. D'E. *Public and private relief in Russia*. Char. Organ Rev., Apr., 1913.

An historical account of the development of public and private relief in Russia, with special emphasis on development of point of view that "aims at raising the poor man himself out of his misery." "The church is now but little concerned in the care of the poor." "Today most of the forms of benevolence are classed as regulated by

a special law." Outside them the freedom of initiative permitted in matters of charity is very limited.

MARRIOTT, J. A. R. *The problem of poverty*. Nineteenth Cent., June, 1913. Pp. 13.

A criticism of the main thesis of an article in the February issue of the "Nineteenth Century," in which the Canon of Westminster maintains that "if the poor are to become richer, the rich must become poorer." The critic holds that "the wealth of the relatively few is not responsible for the poverty of the many"; and devotes this article to the proposition that the opposite of this statement has no basis of justification either in historical fact or in economic theory.

Socialism

ARBUTHNOT, C. C. *Did Jesus teach Christian socialism?* Biblical World, Mar., 1913.

BARUFFALDI, A. and LA RIFORMA SOCIALE. *La meravigliosa storia di unaantina comunale socialista*. Réf. Soc., Jan., 1913.

To restore the quality, price, and fame of its wines, Canneto Pavese set up a municipal wine-making establishment. Fraud, error, and ignorance in administration brought bankruptcy with heavy liabilities. The article is an official report of the episode.

BISHOP, J. B. *Government socialism in Panama*. Scribner, Mar., 1913.

BOUGLE, C. *Rousseau et le socialisme*. Rev. de Métap. et de Morale, May, 1912. Pp. 11.

BULL, E. *Die sozialistische Bewegung in Norwegen*. Archiv f. Gesch. Soz., No. 3, 1913.

CARISTIA, C. *L'ultima crisi del socialismo*. Riv. Intern., Jan., 1913. Pp. 5.

The recent congress at Reggio gave birth to a new socialist party, headed by Bissolati. Since its stand is primarily for universal suffrage, tax reform and similar issues, it constitutes a new attack on the Marxian traditions.

JOUHAUX, L. *Syndicalisme et socialisme*. Rev. Soc., Mar., 1913.

LEROY-BEAULIEU, P. *Public ownership in France*. No. Am. Rev., Mar., 1913.

LOW, A. M. *What is socialism?* I, II, III, IV. No. Am. Rev., Jan., Feb., Mar., Apr., 1913.

RAPPARD, W. E. *Karl Marx and labor legislation*. Quart. Journ. Econ., May, 1913.

ROCHE, J. *Socialism and the state*. No. Am. Rev., May, 1913.

VOIGT, A. *Gemischter und ungemischter Staatssozialismus*. Zeitschr. f. Socialwis., Jan., 1913.

W. Z. *Soziale Kultur und genossenschaftlicher Sozialismus*. Soziale Praxis, May 22, 1913.

Housing

(Abstracts by James Ford)

ARONOVICI, C. *Constructive housing reform*. Nat. Munic. Rev., Apr., 1913. Pp. 11.

Undertakes to determine the economic causes of evil housing conditions in America. Especial reference to rents and size of rooms.

BENTINCK, H. *Co-partnership in land and housing*. Contemp. Rev., May, 1913. Pp. 6.

Outlines methods of the British Rural Co-Partnership Housing and Land Council, and shows the problems and practices of the affiliated associations.

FORD, J. *Some fundamentals of housing reform*. Am. City, May, 1913. Pp. 10.

Relation of housing to health, safety, morality, efficiency. Especial reference to bearing of housing upon the city plan (streets, lots, zoning, taxation, control of urban growth).

FRY, T. C. *The housing question*. Econ. Rev., Apr. 15, 1913. Pp. 10.

Appeal for action in urban and rural districts under present British housing laws.

FUCHS, C. J. *Der preussische Wohnungsgesetzentwurf und das Reich*. Ann. f. Soz. Pol. u. Gesetz., II, 5-6, 1913. Pp. 18.

Critical treatment of details of the Prussian housing bill.

GUIZERIX, L. *Le problème de l'habitation ouvrière*. II. *Les habitations à bon marché*. Mouv. Social, Mar. 1, 1913. Pp. 18.

Summarizes French laws promoting construction of workmen's dwellings.

GUIZERIX, L. *Le problème de l'habitation ouvrière*. III. *Les résultats obtenus*. Mouv. Social, Apr., 1913.

Considers results of French housing laws for promoting cheap construction. Also outlines and criticizes legislation dealing with unsanitary dwellings.

KATSCHER, L. *Vermischte Beiträge zur Wohnungsfrage Krankenkassenverbände und Leipziger Aerzteverband*. Zeitschr. f. d. ges. Staatswis., No. 2, 1913. Pp. 21.

Useful description of the "model" tenements and lodging houses of Vienna, coöperative housing in Belgium, municipal housing in Switzerland, the Helleran garden suburb near Dresden, and the British Guinness Fund.

KUCZYNSKI, R. *Die wohnungsnot in Paris*. Sozial Praxis, May 29, 1913. Pp. 2.

Comparison of number of vacant dwellings of specified low rentals in Paris and Berlin.

NOLAN, J. *City-planning studies for the national conference on city planning*. Landscape Architecture, Apr., 1913. Pp. 24.

Statistical comparison of nine plans for the use of a hypothetical suburban land area.

RUSCH, M. *Der kommunale Wohnungsnachweis*. Jahrb. f. Nat. Oek., Feb., 1913.

TAYLOR, G. R. *Satellite cities, VI. Efficiency and community life. Survey*, June 7, 1913. Pp. 14.

Summary of problems and brief consideration of remedies. Comments by C. M. Robinson, G. B. Ford, Henry Vivian, I. T. Bush, A. W. Crawford, and John Nolen are published in this issue.

The housing problem and its solution. Points from medical officers' reports. Surveying & Housing World, 1913.

Feb. 1, Lindsey (pp. 515-8); Feb. 8, Kesteven (539-541); Feb. 15, Bedfordshire (563-6); Feb. 22, Middlesex (583-5); Mar. 1, Kent (603-8); Mar. 8, Cambridgeshire (627-8); Mar. 15 and 22, Chester (651-5) (671-5); Mar. 29, Hampshire (687-692).

Statistics

(Abstracts by A. A. Young)

BECHTOLD, F. *Die Statistik, ihr Wesen und ihre Bedeutung für unser wirtschaftliches und soziales Leben. Politisch-anthropologische Rev.*, Aug., 1912.

BOWLEY, A. L. *The census of production and the national dividend. Econ. Journ.*, Mar., 1913.

The statistical results and estimates presented in the "General Report" of the recent British census of production are analyzed with reference to their bearing upon income statistics and upon the general concept of the "national dividend."

DE BRAY, A. J. *L'exposition graphique des statistiques. Rev. Econ. Canadienne*, Feb., 1913.

An elementary account, following the lines of Levasseur's well-known paper in the jubilee volume of the Statistical Society.

EDGEWORTH, F. Y. *On the use of the theory of probabilities in statistics relating to society. Journ. Royal Stat. Soc.*, Jan., 1913.

A presidential address before the Royal Statistical Society. Indicates some interesting analogies in molecular physics; discusses the limitations of the theory of sampling and of the application of the normal law to social statistics.

EULENBERG, F. *Die Statistik in Deutschland. I. Deutsche Literaturzeitung*, June 22, 1912.

FLUX, A. W. *Gleanings from the census of production report. (With discussion.) Journ. Royal Statist. Soc.*, May, 1913.

Virtually a supplement to Mr. Flux's admirable "General Report" on the recent English census of production. Deals especially with the figures for the average "net output" per person in different industries.

FORNASARI DI VERCE, E. *La preparazione di un censimento. Giorn. d. Econ.*, Nov.-Dec., 1912. Pp. 24.

A discussion of the problems of the fifth Italian population census (June, 1911), with a recommendation for a permanent census bureau.

GETTEMY, C. F. *The function of the state in relation to statistics of municipal finance. Quart. Pubs. Am. Stat. Assoc.*, Mar., 1913.

GINI, C. *Variability and mutability*. Journ. Royal Stat. Soc., May, 1913.

A defense of the writer's recent book of the same title against criticisms urged in a review in the journal for February, 1913.

KOLLMAN, P. *Die neusten Veröffentlichungen des Internationalen Statistischen Instituts*. Jahrb. f. Nat. Oek., Apr., 1913.

LENOIR, M. *Prix, production et consommation de quelques marchandises*. Bull. Stat. Gén., Jan., 1913.

An important study of the price movements of coal, wheat, cotton, and coffee. The deviations of annual prices from a nine-year average are used as a basis. The standard deviation shows the increasing stability of prices, while correlation coefficients show the general relations between price deviations and similar deviations in production, consumption, and industrial activity (which last is measured by the consumption of coal).

MARCH, L. *Le traitement statistique des mesures mentales*. Bull. Inst. Gén. Psychol., Aug.-Oct., 1912.

Based on *The Essentials of Mental Measurements*, by W. Brown.

MENDELSON, M. *Die Entwicklungsrichtungen der deutschen Volkswirtschaft*, VI, VII. Zeitschr. f. Socialw., Oct., Nov., 1912.

The concluding articles of this useful series, dealing respectively with the new social groupings arising from the development of large-scale industry and with the employment of women in industry.

NEYMARCK, A. *Le développement économique, commercial, industriel, et financier*. Journ. Soc. Stat., Jan., 1913.

A statistical compilation.

NEYMARCK, A. *Les tempêtes de bourse*. Journ. Soc. Stat., Feb., 1913.

A useful table of variations in the prices of important securities on the Paris bourse is printed as an appendix.

NICEFERO, A. *Per la revisione di alcuni punti dell'antropologia criminale*. Riv. d. Antropologia, Vol. XVII, 1912.

Deals especially with the use of the median and of frequency curves.

PEARSON, K. and HERON, D. *On theories of association*. Biometrika, Mar., 1913.

Defends Pearson's methods and criticises adversely some of Yule's work in this field. Although mainly controversial and highly technical the article contains much concrete material of interest.

PERRY, C. A. *A measure of the manner of living*. Quart. Pubs. Am. Stat. Assoc., Mar., 1913.

The proposed index is based upon weights arbitrarily assigned to various items of household equipment.

DE PISSARGEVSKY, L. *Enquêtes sur les travail des femmes mariées dans les fabriques Néerlandaises*. Journ. Soc. Stat., Feb., 1913.

Figures drawn from a recent report by the department of labor of Holland.

DE PISSARGEVSKY, L. *Recherches sur les conditions économiques des ouvrieres industriels en Finlande*. Journ. Soc. Stat., Dec., 1912.

An extended abstract of the results of an inquiry recently completed by the bureau of statistics of Finland, covering wages, family incomes and family budgets.

REW, R. H. *The nation's food supply*. Journ. Royal Stat. Soc., Dec., 1919.

Statistics supplemented by estimates lead to the conclusion that the United Kingdom produces more than one half (in value) of the food it consumes, exclusive of tea, coffee, cocoa, and sugar.

RICCI, U. *L'ufficio di statistica dell' Istituto Internazionale di Agricoltura*. Giorn. d. Econ., Feb., 1913. Pp. 38.

An analysis of the organization and functioning of the statistical bureau of the International Institute of Agriculture.

ROOSTER, W. S. *Some possibilities in the practical application of federal census results*. Quart. Pubs. Am. Stat. Assoc., Mar., 1913.

Urges a revision of census methods, including the earliest possible publication of basic tables and the subsequent publication of special monographs and analytical studies.

SECRET, H. *The use of averages in expressing the wages and hours of Milwaukee street car trainmen*. Quart. Pubs. Am. Stat. Assoc., Dec., 1912.

Concrete illustrations of the limitations of the average as an index of group conditions.

SHOVELTON, S. T. *The graduation of mortality tables*. Journ. Inst. Act., Apr., 1913.

Develops a new method, similar to osculatory interpolation, but possessing the distinct advantage (especially important in graduating tables derived from census and registration material) that the sums of the adjusted and unadjusted values for quinquennial age groups are nearly equal.

SNOW, E. C. *Some statistical problems suggested by the sickness and mortality data of certain of the large friendly societies. (With discussion.)* Journ. Royal Stat. Soc., Apr., 1913.

Ingenuous and skillful analysis of somewhat unsatisfactory data by means of elaborate statistical methods. The most interesting result (and one which has an important bearing upon the operation of the National Insurance Act) is that there is no correlation between mortality and "short period" sickness and only a moderate correlation with longer periods of sickness.

DE VILLE-CHARROLLE, M. *La population industrielle comparée de l'empire Allemand et de la France*. Journ. Soc. Stat., Oct., 1912.

A detailed comparison of occupation statistics, with groupings for sex and for industries.

WEBB, A. D. *The consumption of alcoholic liquors in the United Kingdom*. Journ. Royal Stat. Soc., Jan., 1913.

Finds a marked correlation between the movements of real wages and the total consumption of liquor.

WILLCOX, W. F. *Statistics at the fifteenth international congress on hygiene and demography*. Quart. Pubs. Am. Stat. Assoc., Dec., 1912.

Includes abstracts of papers read before the congress,

WILLCOX, W. F. *The need of social statistics as an aid to the courts.* Am. Journ. Sociol., Mar., 1913; Quart. Pubs. Am. Stat. Assoc., Mar., 1913.

Presidential address before the American Statistical Association. Shows that the decisions in cases involving the constitutionality of labor laws are apt to hinge upon questions of fact, and the facts can be supplied only by an adequate system of social statistics.

WOLFF, H. *Zur Theorie der Statistik.* Jahrb. f. Nat. Oek., Nov., 1912.

An attempt to show the bearings of modern *Erkenntnistheorie* upon the theory of statistics. Special attention is given to Comte, Quetelet, Rümelin, and Sigwart among earlier writers and to Rickert and Tschuprow among moderns.

WOODS, R. A. *Unit accounting in social work.* Quart. Pubs. Am. Stat. Assoc., Mar., 1913.

As an aid to constructive social effort, census and registration statistics and the facts yielded by other administrative activities should be tabulated with full classifications for small local units (neighborhoods).

WURZBURGER, E. W. *The German statistical society and its annual meeting in Berlin, Oct., 1912.* Quart. Pubs. Am. Stat. Assoc., Mar., 1913.

————— *Canadian statistics.* Ann. Am. Acad., Jan., 1913.

A compilation of figures from the *Canada Year Book* and the *Census of Canada*.

NOTES

President Wilson has appointed for membership on the Industrial Relations Commission: Frank P. Walsh, attorney, Kansas City; Professor John R. Commons; Mrs. J. Borden Harriman, New York; Frederick A. Delano, former president of the Wabash Railroad; Harris Weinstock, merchant, San Francisco; S. Thurston Ballard, manufacturer, Louisville, Ky.; Austin B. Garretson, president of the Order of Railroad Conductors; John B. Lennon, treasurer of the American Federation of Labor; and James O'Connell, vice-president of the American Federation of Labor.

The New York department of labor is making a special study of the industrial organization of New York city and the interrelationship of the localization of factories in the city, and such local problems as transportation, building operations, and congestion of population.

A new school of commerce has been established at the University of Nebraska with Professor LeRossignol as director. Mr. Oscar R. Martin has been appointed assistant professor of accounting and business administration in this school.

The article on "The Tariff Board and Wool Legislation," by William S. Culbertson, published in the March issue of the *Review*, has been reprinted as House Document No. 50, 68d Congress, 1st Session.

It is announced that *The Economics of Enterprise*, by Professor H. J. Davenport, will shortly be published by Macmillan.

Houghton Mifflin Company announces the publication of *Industrial Education*, by Albert H. Leake, and *The United States Federal Internal Tax History*, by Harry E. Smith, in the Hart, Schaffner & Marx series.

The studies made by the Texas Applied Economics Club on agricultural problems will soon appear as a bulletin of the University of Texas. Among the subjects to be treated are coöperative credit, farm tenure, crop liens, and farm labor.

The *Proceedings of the First American Conference on Social Insurance* form Publication No. 21 of the American Association for Labor Legislation.

It is announced that the Library of Congress will prepare an annual catalogue of the printed doctoral dissertations submitted at various universities in the United States exclusive of those submitted for professional degrees.

The May issue of the "Bulletin of the New York School of Philanthropy" contains a selected list of books on social subjects published in 1912 (pp. 4).

The Superintendent of Documents, Washington, has just issued a *Second List of Additions to the Price List of Books on Political Economy* (pp. 18).

The Virginia State Library has issued *A List of Newspapers in the Virginia State Library, Confederate Museum, and Valentine Museum*.

The May issue of "Special Libraries" (Special Libraries Association, 93 Broad St., Boston) contains an extended bibliography on the subject of efficiency. Nearly 1200 titles are listed under the supervision of H. H. B. Meyer of the Library of Congress.

William Collins & Co., Ltd., London, have planned a new series of scientific books at one shilling (cloth) under the general title of "The Nation's Library." Among the earlier books which have already appeared are to be noted *Socialism and Syndicalism*, by Philip Snowden; *Sane Trade Unionism*, by W. V. Osborne; *Industrial Germany*, by W. H. Dawson; *The Practical Side of Small Holdings*, by James Long; and *Eugenics*, by Edgar Schuster.

Dr. W. R. Scott, of the University of St. Andrews, has placed all students of early economic thought under a debt of gratitude by compiling a finding list of *Scottish Economic Literature to 1800* (William Hodge and Company, Glasgow and Edinburgh). The bibliography was suggested by a committee consisting of Professor Smart and Dr. Scott as the contribution of a sub-section ("Early Economic Literature") of the general division on "History, Historical Art and Historical Exhibits," for the Scottish Exhibition of National History, Art and Industry, held in Glasgow in 1911. Dr. Scott has done his work with the same distinguished scholarship that characterizes his *Francis Hutcheson* and his monumental *Joint-Stock Companies*. The 639 items catalogued are classified as follows: mediæval period, 50 items; 1565-1695, 85 items; the Darien Company, 104 items; 1696-1707, 105 items; 1707-1776, 197 items; 1777-1800, 98 items. Within each period the entries are arranged chronologically, and the editor contributes an introductory statement to each section. Brief notes are added in some cases, and reprints are indicated. Taken together with Wagner's finding list of Irish economic literature and Massie's great catalogue (still awaiting publication) of English economic tracts, the present bibliography serves to suggest anew the extent and richness of that English economic writing before Adam Smith, of which

historians of economic thought have heretofore made such lamentably small use.

J. H. H.

A. Marcus und E. Weber's Verlag, at Bonn, announces the publication of "Kölner Studien zum Staats- und Wirtschaftsleben." The studies will be issued without interruption and as a rule each number will be devoted to a single study. Among the promoters are Adolf Weber, W. Wygodzinski, and F. Stier-Somlo. The numbers already issued are: I. *Die Filialbetriebe im Detailhandel*, by J. Hirsch; II. *Wanderbewegungen der Juden*, by W. Kaplun-Kogan; and III. *Der Wartestand nach deutschen Beamtenrecht*, by H. C. Schmid-Burgk.

With a view to organizing the economic and scientific relations between Germany and the countries of Latin America, a German-South-American institute was formed in December, 1912, upon the initiative of the "Rheinische Gesellschaft für wissenschaftliche Forschung." Its publications are in German, Spanish, and Portuguese, and comprise studies in political economy, commerce, industry, agriculture, geology, geography, and biology; the annual assessment is 10 marks (Technische Hochschule, Aix-la-Chapelle).

Appointments and Resignations

Dr. B. M. Anderson, Jr., lately of Columbia University, has been appointed assistant professor of economics at Harvard University.

Miss Emily G. Balch has been appointed a member of the Massachusetts Commission on Immigration.

Dr. Abraham Berglund, special agent in the Bureau of Corporations, has accepted an assistant professorship in economics at the University of Washington, at Seattle.

Mr. John A. Brindley has been made head of the department of economics and political science in Iowa State College.

Dr. L. M. Bristol has been appointed assistant professor of sociology at Brown University.

Dr. E. J. Brown has resigned his position as instructor in economics and economic history in the Pennsylvania State College to accept the position of assistant professor of political economy at the Oregon Agricultural College.

Mr. William E. Butt has been appointed an instructor of political economy in the University of Kentucky.

Professor D. T. Clark returns to Williams College this fall after a sabbatical leave of absence.

Mr. Robert Fry Clark has been appointed associate professor of economics and sociology at Colgate University.

Dr. Victor S. Clark has resigned the position of commissioner of immigration, labor and statistics of the Territory of Hawaii, to return to Washington to resume work for the department of economics and sociology of the Carnegie Institution.

Dr. Edward T. Devine was engaged until the middle of August in directing relief work at Dayton as special representative of the Red Cross.

Dr. E. Dana Durand has resigned as director of the United States census to accept a position as director of the bureau of university research and professor of economics at the University of Minnesota.

Mr. D. F. Edwards, who for some time was assistant in industrial organization at the Harvard School of Business Administration, has accepted a position as comptroller of the Olds Motor Works, Lansing, Michigan.

Professor Charles A. Ellwood has taught during the recent summer school at Columbia University.

Mr. C. A. Freeman has been appointed to a position in the Department of Commerce and Labor.

Dr. Theodore W. Glocker has been appointed assistant professor of economics and sociology in the University of Tennessee.

Miss Edith Gray has been advanced from teaching assistant to instructor in economics in Oberlin College.

Professor James E. Hagerty, of Ohio State University, has been granted leave of absence during the year 1913-14.

Professor M. B. Hammond of the Ohio State University has been appointed one of five members of a state commission to investigate and report on methods of payment to bituminous coal miners. For many years there has been a dispute between the miners and the operators in the Middle West as to whether the miners should be paid for the coal at the mine before or after it is screened. It is hoped that the commission will make recommendations for legislation which will settle this question.

Mr. Hornell B. Hart has been made civic secretary of the City Club of Milwaukee.

Dr. R. E. Heilman has been appointed assistant professor of economics at the State University of Iowa.

Professor Charles R. Henderson has been elected president of the United Charities of Chicago.

Mr. Charles H. Huttig, president of the Third National Bank of St. Louis, who is kindly remembered by the members who attended the annual meeting at St. Louis in December, 1910, for his devoted interest and generous hospitality, died July 12.

Dr. Isaac Lippincott has been appointed instructor in economics in Washington University.

Mr. J. M. Matthews has been appointed assistant professor of economics at the University of Maine.

Professor Eben Mumford, recently professor of economics and sociology at Lombard College, has undertaken the work of state leader in farm management field studies and demonstrations in Michigan.

Mr. Stockton Raymond has been appointed instructor and Mr. Ralph B. Wilson assistant in the department of economics and sociology at Ohio State University.

Dr. C. O. Ruggles, of the State Normal School at Winona, Minn., has been called to Ohio State University.

Dr. Charles E. Persons has been appointed assistant professor of sociology in Washington University.

Dr. L. Pohle, professor at the Academy of Frankfort, has been appointed to a professorship in political economy at the University of Breslau, succeeding Professor Wolf.

Dr. William H. Price, of Yale University, has been appointed professor of political economy at the Imperial University of Tokyo.

Dr. Victor Rosewater, editor of "The Omaha Bee," has recently served as president of the charter convention which has completed the first home rule charter for Omaha, to be submitted to the people under the provisions of the new municipal home rule amendment to the Nebraska constitution.

Mr. I. L. Sharfman has been appointed junior professor of economics at the University of Michigan.

Mr. George W. Stevens has been promoted to a full professorship in economics in the University of Maine.

Dr. Arthur E. Swanson, instructor in business organization at Northwestern University, has been advanced to assistant professor of business organization and director of evening classes in the School of Commerce.

Professor Charles A. Tuttle has been appointed professor of economics and social science at Wesleyan University. Professor Tuttle received, in June, the degree of LL.D. from Wabash College.

Professor George O. Virtue, of the University of Nebraska, has been appointed a member of a state board of five commissioners to report on tax reform and to prepare a bill which is to be submitted to the next legislature.

Mr. G. H. Von Tungeln has been appointed assistant professor of rural sociology at Iowa State College.

Dr. L. H. D. Weld, of the extension department, University of Minnesota, has been appointed assistant professor of economics and director of the bureau of agricultural research in the same university.

Mr. Deles F. Wilcox announces that he has severed his connection with the Public Service Commission for the First District, New York, and will engage in private practice as a consulting franchise and public utility expert.

Mr. Philip G. Wright, who has been substituting at Williams College has accepted a position at Harvard University as assistant in economics.

Professor Allyn A. Young has been appointed a member of the special commission to prepare a revision and codification of the tax laws of the state of New York. The other members are William Lustgarten, John J. Hopper, Edward L. Heydecker, and Thomas J. Creamer.

Maurice L. Muhleman died June 12. He was Deputy Assistant Treasurer in New York from 1888 to 1901. His contributions to monetary literature were many. The most important work was *World's Principal Monetary Systems*, which passed through several editions.

The death is announced of M. Alfred de Foville, of Paris, at the age of 70. In 1878 he was appointed professor at l'Ecole libre des Sciences politiques and has held many other official and academic positions. Among his most important writings are to be noted *Essai sur les variations des prix au XIX^e siècle* and *La transformation des moyens de transport et ses conséquences économiques et sociales*. He had charge of the organization of the "Bulletin de Statistique et de Législation comparée," published by the Ministry of Finance.

Canon Barnett, founder of Toynbee Hall, died July 17 at the age of 69.

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No. 4

THE SECURITY HOLDINGS OF NATIONAL BANKS

An interesting feature of the national banking system of the United States has been the investment of a considerable part of the funds of the banks in securities other than United States bonds. On June 4, 1913, the net holdings of such securities by the 7,473 national banks of the United States was \$1,050,970,119—the largest absolute amount, and the largest proportion relative to total banking assets held at a corresponding season in the history of the national banking system.

The net amount of such investments—corresponding to “security holdings” as employed in the present paper—is obtained by adding to the amount of “bonds, securities, etc.” as reported to the Comptroller of the Currency, the amount of “other [than United States] bonds to secure United States deposits,” and deducting from this total the amount of “bonds borrowed.” Omission is made of all United States bonds, whether held to secure circulation, to secure deposits, or ‘on hand’—for the reason that other than investment considerations may be regarded as having induced such purchases. On the other hand, the occasional temporary use of other than United States bonds to secure public deposits does not affect their primary significance as investment securities, and they are therefore included. Deduction of “bonds borrowed” first becomes possible in November, 1902, prior to which no report specifically covering such transactions was required. The foregoing method of computation errs on the side of conservatism in that some part of “bonds borrowed” consists of United States bonds, and also in that the banks’ holdings of short-time obligations of railroad, public utility, or other corporations are sometimes reported under the head of “loans and discounts” and not of “bonds, securities, etc.”¹ But as against this, the

¹ As regards existing practice, Acting Comptroller T. P. Kane writes me: “Short time obligations or notes of railroad, public utilities, or other corporations are preferably to be carried under the heading of ‘Loans and discounts,’ but this is not the universal practice, as many banks carry them under the heading of ‘Bonds, securities, etc.’ This office has not made any specific requirement in the premises, leaving it to the banks to determine under which heading to carry them. Unlike a regular bond, however, such notes are held to be subject to the limit of loans.”

banks are required to return under the head of "bonds, securities, etc." their holdings of "stocks, presumably taken for debt," and of "warrants, claims, judgments, etc."

I

The security holdings of the banks, including "bonds borrowed," were distributed, at the latest available date, June 14, 1912, as follows:

	Per cent
State, county, and municipal bonds.....	16.63
Railroad bonds	32.87
Other public service corporation bonds.....	18.13
All other bonds.....	20.73
Stocks (presumably taken for debt).....	3.98
Warrants, claims, judgments, etc.....	3.50
Various securities with the Treasury as security for public deposits.....	2.88
Foreign government bonds.....	.79
Other foreign bonds and securities.....	.40

The only significant variation in relative distribution, since September 1, 1909, when the classification upon which this distribution is based was first reported by the banks and thereafter tabulated for one call in each year in the comptroller's annual report, has been a moderate decline in the proportion of railroad bonds and a corresponding increase in the securities of public service and industrial corporations.

Authority to make investments in bonds, although not expressly conferred, has been held as included in the powers of a national bank to discount and negotiate promissory notes, bills of exchange, and other evidences of debt, and this administrative construction has been confirmed by judicial decision that national banks are authorized to purchase corporate and municipal bonds as such evidences of debt.² Whatever doubt may have remained, in the absence of adjudication by the United States Supreme Court, was *de facto* dispelled in 1908 by the provisions of the Aldrich-Vreeland act looking to the possible acceptance of bonds other than United States bonds as security for additional note circulation.

The motives leading to such investments are in some cases specific and local—as the purchase of the bonds of a particular state or city for tax-exemption purposes, or to serve as the legal or practical requisite for securing public or semi-public deposits. So

² *Newport National Bank v. Board of Education*, 70 S.W. 186 (*Digest of Decisions Relating to National Banks*, Washington, 1912, p. 497).

too the profitable banking account of a private corporation may sometimes be more certainly retained by participation in its financing. But such purchases, as well as the bonds acquired by the taking over of hypothecated securities, explain only a fractional part of the banks' aggregate holdings.³

As familiar banking practice, the purchase and ownership of such securities by the national banks is commonly explained upon the theory of a "secondary reserve."⁴ Sound banking policy, it is held, dictates that cash reserves should be supplemented by income producing investments of indubitable safety and easy marketability—available for quick, favorable conversion into cash, when monetary drain threatens exhaustion of the primary reserve. Thus, Professors E. D. Howard and J. F. Johnson state that "the ready market which is at hand under normal conditions for the bonds [securities, etc. owned by the banks] causes the bank to regard them as a form of secondary reserve which can almost immediately be converted into money in case of emergency."⁵ Professor F. A. Cleveland includes such securities among "those assets which are held as an 'invested-reserve' as a means of obtaining 'cash' to meet extraordinary demands on credit-accounts outstanding."⁶ Mr. Horace White declares: "It is desirable that a bank should have a portion of its interest-bearing assets so invested that it can be quickly turned into cash to meet a sudden emergency. . . . Stock exchange securities are held by banks, partly because they can be sold at short notice to meet such emergencies."⁷ Mr. Victor Morawetz adds that "As long as finan-

³Hollander, *Bank Loans and Stock Exchange Speculation* (Washington, 1911), p. 17. Here and there particular banks have entirely abstained from such investments, and in rarer cases this restraint has become an avowed policy.

⁴The term "secondary reserve" has no precise meaning in national banking law or administration. Mr. Frank A. Vanderlip writes me that in the street use of the phrase, "it is represented by bonds, call loans, and anything that can readily be liquidated in twenty-four hours or so. Commercial paper, which is put in the portfolio, with a definite maturity, such as sixty or ninety days, cannot, of course, be considered a part of the so-called secondary reserve. Abroad where the system of acceptances of commercial paper and the presence of a discount market gives prime acceptances a ready marketability, such paper could be considered a part of this reserve."

⁵*Money and Banking* (New York, 1910), p. 267.

⁶*The Bank and the Treasury* (New York, 1908), p. 114. Professor Cleveland more than any other student of our national banking system has given attention to the effect of security holdings upon banking activities.

⁷*Money and Banking* (Boston, 4th ed., 1912), p. 210. Mr. White, however, criticises severely the "misuse of terms" whereby certain state laws allow a

cial conditions generally are not strained, bonds or other securities that have a ready market may serve as a reserve, because by selling such bonds or securities a bank can obtain money."⁸

In accordance with the theory of a "secondary reserve," the proportion of their resources which the banks might be expected to maintain in the form of such securities should be—apart from seasonal, cyclical, and sectional fluctuations—reasonably constant. As a matter of fact, practically from the establishment of the national banking system to the present time the ratio of security holdings to banking resources has increased. Occasionally, there has been decline; but thereafter the tendency has been resumed and a higher ratio attained. The ratio of securities to total resources has been, for each year since 1863, as follows:

TABLE 1.—Ratio of securities to total resources.

Year	Averaged calls	Autumn call	Year	Averaged calls	Autumn call
	<i>Per cent</i>	<i>Per cent</i>		<i>Per cent</i>	<i>Per cent</i>
1863	.59	.59	1888	3.54	3.54
1864	.32	.47	1889	3.64	3.64
1865	.91	1.39	1890	3.81	3.67
1866	1.16	1.03	1891	3.91	3.89
1867	1.30	1.43	1892	4.25	4.40
1868	1.29	1.32	1893	4.63	4.77
1869	1.35	1.48	1894	5.50	5.56
1870	1.43	1.56	1895	5.68	5.69
1871	1.36	1.41	1896	5.69	5.78
1872	1.28	1.33	1897	5.72	5.63
1873	1.27	1.29	1898	6.11	6.37
1874	1.43	1.48	1899	6.67	6.88
1875	1.64	1.78	1900	7.08	7.27
1876	1.75	1.88	1901	7.61	7.87
1877	1.87	1.97	1902	8.03	8.06
1878	2.04	2.08	1903	7.90	7.94
1879	1.95	2.11	1904	7.99	8.12
1880	2.16	2.31	1905	8.40	8.49
1881	2.47	2.62	1906	8.13	8.14
1882	2.81	2.75	1907	8.32	8.44
1883	2.93	2.99	1908	8.95	8.97
1884	3.11	3.12	1909	9.10	9.22
1885	3.18	3.18	1910	8.38	8.45
1886	3.28	3.25	1911	9.24	9.59
1887	3.37	3.38	1912	9.45	9.43

portion of the reserves of state banks to consist of the bonds of the state itself, or of the United States "since a bank reserve signifies something which can be immediately used to pay the demand obligations of the bank" (*ibid.*, p. 366). Particulars as to such provisions in state banking systems are conveniently found in Professor George E. Barnett's *State Banks and Trust Companies since the Passage of the National Bank Act* (Washington, 1911), p. 115.

⁸ *Banking and Currency Problem in the United States* (New York, 1909), pp. 18-19.

The annual increase in the ratio of securities, as indicated by the percentage of securities to total resources, averaged at successive calls in each year, has been interrupted but seven times in the history of the national banking system. Of these, three (1863-64, 1867-68, 1870-1873) may be neglected as pertaining to the period before 1873. The 1902-03 arrest is apparent rather than real, being due to the inclusion of "bonds borrowed" in security holdings, in the computation of the 1902 ratio.⁹ Of the remaining three occasions, one (1878-79) derives its quality from the sharp loan expansion which began at the end of 1879, in final recovery from the panic of 1873. A comparison of the securities held as late as the autumn call of 1879 with those held at a corresponding date of the preceding year would show increase instead of reduction. The significant occasions are 1905-06 and 1909-10, in each of which periods the initial year was marked by relatively heavy bond-buying—1905 as a year of high business prosperity, 1909 as a year of premature business recovery.¹⁰

The gain in relative importance of securities has not been at the expense of any one item or group of items of banking assets. One element after another has tended to increase or diminish, in response to specific episodes in our monetary history; but the point of arrest or reversal has been far less remote. Up to 1890 the gain in the security ratio is absorbed in the decline in relative importance of investments in United States bonds. From 1890 to 1900 the gain is reflected in the decline in the ratio of loans and discounts to total resources. From 1900 on, the explanation is found in a composite of smaller declines in the ratios of United States bonds, lawful money, and due from banks. The percentage relation of the important constituent items to the aggregate resources of national banks has been, for each year since 1863, as follows:¹¹

⁹ Cf. page 1, above.

¹⁰ If instead of the averaged, the autumn calls be compared, three additional arrests are noticeable—1865-66, 1896-97, and 1911-12, whereas that of 1878-79, as noted above, disappears.

¹¹ The percentages of loans, United States bonds, and lawful money from 1897 to 1912 are taken from the 1912 report of the Comptroller of the Currency (Table 47, p. 197). For the years before 1897, it has not been possible to use the percentages in the corresponding tables in earlier reports, since, as Comptroller Lawrence O. Murray informs me, "it appears that for the years prior to 1897 the combination of the capital stock, surplus, undivided profits, national bank circulation, and individual deposits was used as the basis of the computation instead of the aggregate resources."

TABLE 2.—Percentage of loans, United States bonds, lawful money, net securities, and due from other banks to total resources.

Year	Loans	U. S. bonds	Lawful money	Net securities	Due from other banks
1863	32.3	33.5	8.3	.5	15.5
1864	31.3	36.3	15.0	.4	11.4
1865	35.8	31.4	15.2	1.3	7.8
1866	39.5	27.9	14.0	1.0	8.0
1867	40.6	27.9	7.5	1.4	6.9
1868	42.1	26.5	6.7	1.3	7.0
1869	45.6	25.6	7.1	1.4	6.7
1870	47.3	25.0	6.4	1.5	7.2
1871	48.0	23.6	7.0	1.4	8.2
1872	49.9	23.3	6.9	1.3	7.2
1873	51.5	22.5	7.2	1.2	8.1
1874	50.8	21.9	7.6	1.4	7.1
1875	52.3	21.1	7.0	1.7	7.8
1876	50.9	21.0	7.3	1.8	8.0
1877	51.2	21.9	7.0	1.9	7.4
1878	47.1	25.0	7.2	2.0	7.8
1879	47.0	22.9	7.3	2.1	8.9
1880	49.4	19.0	8.2	2.3	10.1
1881	49.7	17.8	7.3	2.6	9.7
1882	51.8	16.4	7.2	2.7	8.2
1883	55.1	16.0	7.9	2.9	8.8
1884	54.6	15.9	9.6	3.1	5.8
1885	53.6	13.9	10.8	3.1	9.6
1886	57.7	11.5	8.9	3.2	9.5
1887	60.5	8.5	9.3	3.3	9.7
1888	59.8	8.2	9.5	3.5	10.4
1889	60.6	6.4	8.8	3.6	11.1
1890	63.2	5.4	8.9	3.6	10.6
1891	62.4	5.4	9.2	3.8	10.5
1892	61.8	5.2	9.3	4.4	11.6
1893	59.2	7.2	11.1	4.7	8.9
1894	57.7	6.4	11.5	5.5	11.4
1895	60.1	6.8	9.9	5.6	10.9
1896	58.0	8.0	10.5	5.7	10.1
1897	55.3	7.0	6.4	5.6	13.3
1898	54.2	10.6	9.2	6.3	13.1
1899	53.7	7.1	10.0	6.8	14.7
1900	53.2	8.1	10.3	7.2	14.5
1901	53.0	7.8	9.5	7.8	13.7
1902	53.7	7.5	8.3	8.0	13.4
1903	55.2	8.6	8.8	7.9	12.9
1904	53.4	7.9	7.2	8.1	13.7
1905	53.9	7.4	8.9	8.4	13.8
1906	54.0	7.8	7.8	8.1	13.3
1907	56.1	7.9	8.4	8.4	12.7
1908	52.9	7.9	9.6	8.9	13.3
1909	53.5	7.6	9.5	9.2	12.8
1910	55.6	7.5	8.9	8.4	12.3
1911	54.5	7.4	8.6	9.5	12.5
1912	55.1	7.1	8.1	9.4	13.1

II

The course of bond accumulation by the national banks reflects the expansion of banking operations in relation to general financial and industrial development.

From the organization of the national banking system in 1863 to the panic of 1873, the banks of the country made no significant additions to their security holdings. Upon two occasions—January-April, 1867, and March-June, 1870—abrupt increases occurred, traceable to special transactions, but thereafter holdings remained fairly constant around the higher levels. Of the original amount so held, the largest part, owned in the main by eastern city banks, might be regarded as a heritage from the reorganized state banks. On April 1, 1867, the 1,642 banks in operation, with total resources of \$1,465,000,000, held only \$20,194,000 securities, of which more than one half was owned by the banks of New York, Albany, Philadelphia, and Boston, and practically three fourths by banks in the states of New York, Massachusetts, and Pennsylvania. With the rapid reduction of the national debt and the tempting rise in the price of government securities in the years following 1866, the banks reduced their holdings of United States bonds used for purposes other than to secure circulation; but the proceeds of such liquidation were utilized as reserves and credited to surplus and undivided profits. The return of business activity from 1869-1870 on brought with it an expansion of banking energy; the number of banks increased from 1,612 in 1870 to 1,968 in 1873, and the volume of loans grew correspondingly. But again during these as during the earlier years, the banks acquired no additional securities. Indeed, allowing for the additional banks organized and the continued liquidation of United States bonds, the contrary tendency prevailed. In absolute amount the security holdings of the banks from 1870 to 1873 remained almost constant and in proportion to loans, deposits, and banking capital, the importance of such holdings actually declined.

Thus during the first decade of the national banking system the practice of bond purchase, whether as a "secondary reserve" or otherwise, had not yet begun to show itself. This was true both of years of depression and of years of business activity. In dull times idle money accumulated; in brisk times it was absorbed in loan expansion. Barring special transactions the investment of any appreciable part of their productive resources in bonds

was neither a common nor a growing practice of the national banks.

The crisis of 1873 culminated in panic in the last ten days of September—during which time the New York Stock Exchange remained closed. Banking operations during the panic are primarily of interest in the present connection as indicating the non-liquid character of bonds in time of financial spasm. From September 12 to October 13, 1873, the banks reduced their loans from \$944,000,000 to \$882,000,000 and deposits of all kinds fell off from \$638,000,000 to \$530,000,000. But between the same dates, the security holdings of the banks actually increased from \$23,700,000 to \$25,400,000.¹²

The collapse of 1873 was followed in customary sequence by a period of utter prostration (1873-74) and this by a premature and short-lived revival (1874-75). During both prostration and premature revival the banks added to the relative importance of their security holdings with notably greater rapidity than in the profound and long continued depression which succeeded (1875-79). The post-panic loan recovery culminated in October, 1875, the account then showing a new gain of 4.2 per cent over the pre-panic date; but in this same interval security holdings increased rapidly and uninterruptedly from \$23,700,000 to \$33,500,000 or 41.3 per cent. On the other hand, the depression of 1875-79, marked by a continuous reduction in loans, was accompanied by a very gradual increase in bond investments—the gain in relative importance, despite reduction in total resources, being less from year to year than in the post-panic period.

Business activity returned in 1879, and culminated in 1882. Banking operations, however, continued to expand, although at diminished rate, for two years more. Loans increased rapidly from 1879 to 1882, reaching a maximum in 1884, and cash reserves and loan rates showed similar tendencies. The growth in security holdings closely paralleled this expansion, such investments increasing from \$39,600,000 in 1879 to \$66,100,000 in 1882 and to \$71,300,000 in 1884.

¹² The minor disturbances of 1884 and 1890 were attended by the same phenomena. The panic conditions of May, 1884, were reflected in a shrinkage of loans from \$1,333,000,000 on April 29 to \$1,269,000,000 on June 30, whereas security holdings declined only from \$73,400,000 to \$72,500,000. The stringency of November, 1890, appeared in a reduction of the loan account from \$1,986,000,000 on October 2 to \$1,932,000,000 on December 19; but between the same dates the bond holdings of the banks actually increased from \$115,500,000 to \$116,600,000.

The industrial world recovered from the disasters of 1884 with surprising rapidity. Before the spring of 1886, bank loans had reached and passed the high point of pre-panic conditions. Thereafter up to 1890, the expansion of credit, keeping pace with heightened business activity, was even more notable. The movement was arrested rather than reversed by the financial stringency of 1890. Loans moved up cautiously again in 1891 and 1892, until the mid-year collapse of 1893. During the first phase (1885-1890) of this period the bond purchasing policy of the banks underwent no change. The banks simply invested a gradually increasing proportion of their increased resources in additional securities. From 1884 to 1890 the ratio of bond holdings to loans and discounts remained almost constant, and the ratio to assets increased slowly and regularly. Specific influences contributed to this stability. The era of industrial combination and syndicate flotation, on the scale which the events of the next decade were to make familiar, had not yet dawned. Furthermore, from 1886 on the banks inclined to apply some part of the resources which otherwise might have been devoted to investment securities to the purchase of United States bonds, with a view to securing deposits from out the federal surplus. With the stock market liquidation of 1890 and the check to business activity which followed, the banks tended to larger investment in securities. The ratio of bond holdings to loans and to resources rose sharply through 1891-92.

The business world began to show signs of fatigue by the end of 1892. The increase in deposits was checked, the reserves of lawful money declined and the expansion of loans ceased. Accompanying this arrest was stoppage in bond buying. The panic months (May-October, 1893) witnessed contraction in loans, reduction in deposits, and abrupt withdrawal of cash, followed by rapid accumulation of lawful money. During this interval security holdings remained virtually stationary—\$150,700,000 on May 4, \$149,600,000 on July 12, \$148,500,000 on October 3. Practically no relief whatever was afforded the panic strain by the liquidation of bonds, while very slight preparatory aid was derived from the same source.

The panic of 1893 was followed by industrial prostration and agricultural depression. There was false recovery early in 1895, but relapse followed and business remained stagnant until with bumper crops and gold imports activity definitely returned in

the summer of 1897. During these four years banking operations fluctuated within narrow limits. The loan account had barely returned to the pre-panic level in October, 1897, and in this recovery the country banks played no part. Security holdings, on the other hand, increased no less than 40 per cent within the same period. But practically all of this occurred in 1894 and in 1897. In 1895-96 there was, actually, slight liquidation, the surplus cash then at the disposal of the banks being in part applied to the purchase of United States bonds, in part returned to the shareholders in reduction of capital stock, in part retained by the banks as excess reserves.

The decade from 1897 to 1907 is still fresh in mind as a period of industrial energy and financial activity—perhaps the most memorable in the history of the United States. Agriculture prospered, manufactures developed, railroads revived, and industrial enterprises expanded and consolidated. These conditions were reflected in a notable growth of banking activity. The loans of the national banks increased from \$2,066,000,000 to \$4,678,000,000 and individual deposits from \$1,853,000,000 to \$4,319,000,000. From 1902 on further expansion was checked only by the close approach of cash holdings to legal reserve requirements. During this entire period the banks applied an increasing proportion of their resources to the purchase of bonds. Security holdings grew from \$208,800,000 in 1897 to \$708,500,000 in 1907. In absolute amount the increase was uninterrupted; in relation to loans and resources the movement was most pronounced from 1897 to 1901, continuing more slowly thereafter to the close of the period. Only in 1905, in reflex of the extraordinary loan expansion of that year was the tendency reversed.

The crisis of 1907 culminated in panic conditions in October-November 7. Between August 22 and December 3—the closest dates for which figures are obtainable—there occurred, coincident with reduction in loans, deposits, and reserves, an actual increase in security holdings, both absolute and relative to total resources. The certainty of this evidence is somewhat obscured by the large amount, \$106,100,000, of bonds borrowed by the banks between the panic dates.¹³ Such borrowing facility, tending as it did to

¹³ A consequence of Secretary Shaw's first acceptance of other than United States bonds to secure government deposits in 1902, had been to encourage the national banks in the practice of borrowing for temporary use from other banks, trust companies or individuals, up to that time, United States bonds, but thereafter state, municipal, and corporate securities acceptable as se-

make possible an increase in cash reserves by securing larger public deposits, might at first glance be construed as relieving the banks to that extent from the necessity of liquidating their securities and, accordingly, as explaining the absence of any such liquidation. As a matter of fact, however, the actual resort to such borrowing on as extensive a scale as transpired, with all the exceptional circumstances that attended it—marked the rigidity of the bank's security holdings. Had these securities possessed any liquid character whatsoever, realization in this direction would have been, during the panic weeks, by far the line of least resistance.

The course of events since 1907 has repeated the familiar sequence of post-panic history. Loans contracted in the prostration of 1908, recovered in the premature revival of 1909, slowed up again in the reaction of 1910-11, and entered upon a healthier expansion in 1912. In the matter of security holdings, the early action of the banks was determined largely by the incidents of the panic. With the withdrawal of government deposits in the succeeding eighteen months, a large part of the "bonds borrowed" was released from service as collateral—not, however, to be returned to the institutions and individuals from whom borrowed but apparently to be purchased and transferred to the productive investments of the banks. In the twelve months of 1911 the security holdings of the banks increased from \$858,700,000 to \$1,017,700,000, whereas the years 1912 and 1913 have been marked by small and gradual additions.

III

Although the banks have applied an increasing proportion of their resources to investment securities, this movement has been

cured for public deposits. The authorization of this practice is indicated by the appearance in the Comptroller of the Currency's abstract report of the liabilities of the national banks of an item "bonds borrowed," first in the returns of November 25, 1902, and regularly thereafter. The amount of bonds so obtained by the banks was fairly constant from 1902 through the greater part of 1906; at only one date (March, 1904) did the figure rise markedly. From the end of 1906, however, with the increasing strain upon the money market and the more liberal response of the treasury in placing public deposits there was more active bond borrowing by the banks, continuing until the lull of the summer of 1907 permitted a reduction of the account. During the panic weeks, this movement was actively resumed, the natural impulse of the banks to seek such aid being then stimulated by the relief committee of the New York trust companies, acting under the initiative of Mr. J. P. Morgan.

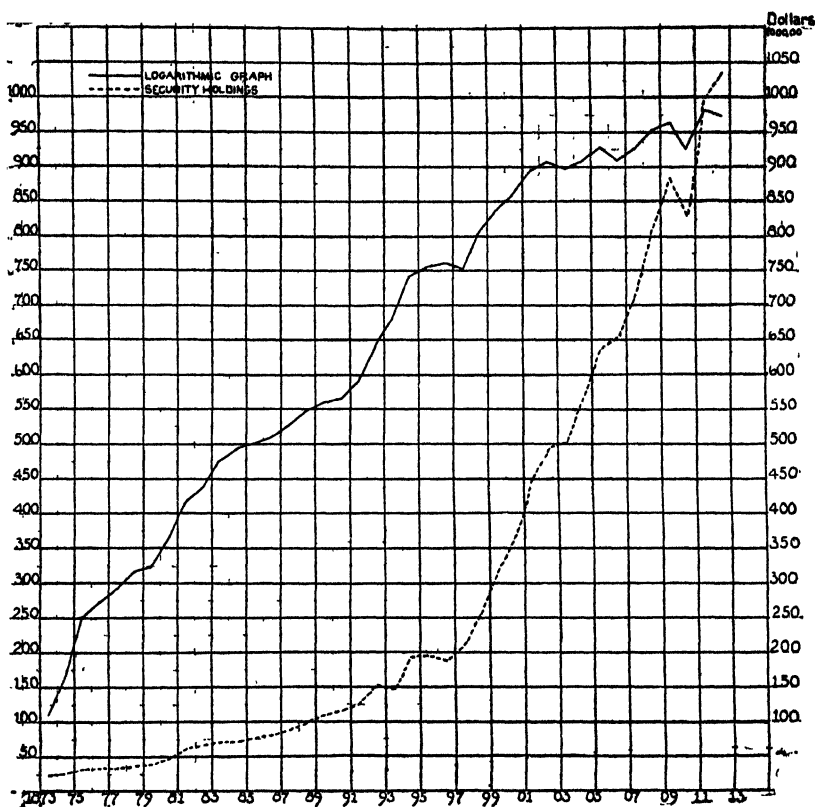
continuous in tendency rather than uniform or regular in pace. An examination of the changes in ratio from year to year indicates that the gain has been markedly greater in certain periods than in others. The principle of variation which might be supposed to prevail, in accordance with the theory of "secondary reserve," is that the banks buy bonds rapidly in dull times when cash accumulates and business demands slacken, and slowly or not at all, or, indeed, liquidate some part of such holdings as they have, when business is active and cash in demand. The actual course of variation, as exhibited in the experience of the national banks, both in aggregate and in groups, has been notably different from this simple or absolute movement. The following table shows the percentage increase or decrease in the ratio of securities to total resources for each year over the corresponding ratio of the year preceding:

TABLE 3.—*Percentage increase or decrease in the ratio of securities to total resources.*

Year	Averaged calls	Autumn call	Year	Averaged calls	Autumn call
	<i>Per cent</i>	<i>Per cent</i>		<i>Per cent</i>	<i>Per cent</i>
1868	-0.7	-7.6	1891	2.6	5.9
1869	4.6	12.1	1892	8.6	13.1
1870	5.9	5.4	1893	8.9	8.4
1871	-4.8	-9.6	1894	18.7	16.5
1872	-5.8	-5.6	1895	3.2	2.3
1873	-0.7	-3.0	1896	0.1	1.5
1874	12.5	14.7	1897	0.5	-2.5
1875	14.6	20.2	1898	6.8	13.1
1876	6.7	5.6	1899	9.1	8.0
1877	6.8	4.7	1900	6.1	5.6
1878	9.0	5.5	1901	7.4	8.2
1879	-4.4	1.4	1902	5.5	2.4
1880	10.7	9.4	1903	-1.6	-1.4
1881	14.3	13.4	1904	1.1	2.2
1882	13.7	4.9	1905	5.1	4.5
1883	4.2	8.7	1906	-3.2	-4.1
1884	6.1	4.3	1907	2.3	3.6
1885	2.2	1.9	1908	7.5	6.2
1886	3.1	2.2	1909	1.6	2.7
1887	2.7	4.0	1910	-7.9	-8.3
1888	5.0	4.7	1911	10.2	13.4
1889	2.7	2.8	1912	2.2	-1.6
1890	4.6	0.8			

The proportional change for all parts of the period considered is shown graphically in the following logarithmic curve, in which the proportional rate of change is indicated directly by the steepness of the curve at the given point. There is also a graph showing

the absolute amounts of net security holdings covering the same period. In both cases the autumn call is used:



As appears from the foregoing curve, the years of most rapid increase from 1890 on were 1891-94, 1898-01, 1905, 1908, and 1911; whereas the years of slowest increase or of outright decline were 1895-97, 1902-04, 1906-07, 1909-10, and 1912. The smallest percental increase (4.5 in 1905) in the first group of years exceeds the largest percental increase (3.6 in 1907) in the second group. The increase or decrease in ratio in particular years or groups of years may result from unusual changes in either of the two factors that determine the proportion—amount of securities or volume of resources. As a matter of fact, with exception of 1898 in the case of the “rapid” years and of 1910 in the case of the “slow” years, the marked changes result primarily from abrupt variation in the amount of securities rather than in the volume of total resources. In the following table, comparison is made of the

bonds acquired in these two groups of years, both as percentage gains and as absolute amounts:

TABLE 4.—*Comparison of the bond purchases in different years.*

Periods	Average annual per cent gain	Absolute increase (million dollars)
"Rapid" periods		
1891-94	10.9	78
1898-01	8.7	210
1905	4.5	68.4
1908	6.2	101.4
1911	13.4	166
		11) 623.8
		56.7 average annual absolute gain
"Slow" periods		
1895-97	0.4	15
1902-04	1.0	118
1906-07	-0.2	73.5
1909-10	-2.8	20.6
1912	-1.6	38
		11) 265.1
		24.1 average annual absolute gain

If these grouped years be considered in relation to general economic characteristics,¹⁴ the "rapid" periods comprise, in the main, years either of (a) intense business activity or of (b) complete prostration following financial crisis, or both, whereas the "slow" periods include years either of (a) business depression following panic prostration or of (b) business reaction following speculative excess, or both. Thus, of the "rapid" periods, 1891 and 1892 were the highly active years that preceded the panic of 1893, and 1894 was the year of prostration that succeeded the crisis. The years from 1898 to 1901 formed a notable period of industrial expansion and financial adventure—interrupted by mild reaction in 1900—during which the characteristic problems of modern corporate organization first became conspicuous; 1905 was a year of high prosperity; and post-panic prostration again distinguished 1908; 1911, though of mixed quality, was attended by the incidents of reaction from premature business recovery. Of the slow

¹⁴ Cf. Professor Wesley C. Mitchell's valuable studies in the *Journal of Political Economy*, in particular the conspectus in "Security Prices and Interest Rates in 1910-12," *ibid.*, June, 1913. The same author's monumental *Business Cycles* (University of California Press) has reached me, unfortunately, only as these pages are passing through the press.

periods, 1895-97 was marked by the depression which follows post-panic prostration; 1902-04 and to a considerable extent 1906-07 were periods of relapse from speculative excess; 1909-10 represented premature recovery and consequent relapse; and 1912 exhibited the hesitant characteristics of imperfect business revival.

The same tendencies, although less conspicuous, are traceable in the period before 1890. Omitting the first decade of the national banking system as antedating the movements under consideration, the subsequent years of relatively rapid bond buying were 1874-75, a period of premature business revival, and 1880-84 and 1887-88—periods of marked business activity; whereas the years of relatively slow bond buying were 1876-79 and 1885-86, periods of business depression consequent upon financial disturbance, and 1889-90, a period of business arrest. In the panic of 1873, and in the minor disturbances of 1884 and 1890, the banks either kept their security holdings virtually intact or made absolute addition thereto.¹⁵

These movements can be summarized in the following tentative statement: The national banks buy bonds freely in periods of high business activity characterized by attendant circumstances of large cash deposits, active markets, pool operations, security flotations and syndicate underwritings. This upward movement is checked by the fatigue which follows speculative excess and foreshadows the advent of financial disturbance. Panic strain is neither anticipated nor relieved by the liquidation of securities. With the prostration that marks the end of spasm, securities are again freely acquired—in part the enforced taking over of hypothesized collateral, in part the productive reinvestment of swollen reserves. This prostration is succeeded by depression, marked by smaller cash deposits and inactive financing, during which the banks add but slowly to their bond holdings. If there be premature recovery, securities are bought more actively; but with the relapse into dullness this tendency in turn is arrested. Not until business activity is resumed on a large scale are bonds again bought with rapidity and the cycle resumed.

¹⁵ It would be extremely interesting to study the cyclical relation of bond buying to the crises of 1893 and 1907 and to the disturbances of 1884 and 1890. We should probably find that, in this particular at least, the business cycle is tending to pass from the long revolution to a succession of minor swells and depressions. Such a study might very well be incident to an analysis of the variations in security holdings of the New York banks (see Professor O. M. W. Sprague's useful *History of Crises under the National Banking System*, Washington, 1910).

IV

In accordance with the theory of "secondary reserve," a marked seasonal fluctuation in security holdings might be anticipated. This should take the form of purchase in the spring and summer when money is easy and of liquidation in the autumn in preparation for the interior drain.

Examination of the returns made by the banks to the Comptroller of the Currency for the five calls distributed at approximately uniform intervals over each year afford little evidence of such recurrent liquidation. Of the forty years of banking experience from 1873 to 1913, it appears that in seventeen years there has been either constancy or actual increase in security holdings from each call to the succeeding call. In the remaining twenty-three years, there has been actual liquidation in the volume of such holdings between some two consecutive calls.

There has, moreover, been no uniformity as to the season in which such reduction has occurred. In three, out of the twenty-three liquidating years, the movement took place in the first half-year; in thirteen, in the second half-year; in two, there was overlap. Of the thirteen second half-year movements, the decline occurred between the summer and autumn calls in one year, between the autumn and year-end calls in five years, between the year-end and first-year calls in two years; in five years the autumn to year-end liquidation extended back to the summer call or forward to the first-year call, or both.

A seasonal fluctuation, if tested by absolute amount, is likely to be obscured by the rapid growth in banking resources. In such event, the variation will take the form of slower increase rather than of outright decrease. If the security holdings of the banks be averaged at corresponding seasonal dates, for the period from 1873 to 1913, and the results compared, a traceable although inconsiderable variation is evident:

Call	Average holding (million dollars)	Per cent gain over preceding call
Nb. 1 (first-year)	276.9	1.8 ¹
" 2 (spring)	283.8	2.5
" 3 (summer)	291.0	2.4
" 4 (autumn)	295.9	1.6
" 5 (year-end)	297.0	0.3

¹ Computed as the increase in the average holding at the first-year call for 1874-1913, over the average holding at the year-end call for 1873-1913.

The table of average holdings at seasonal dates shows that activity in bond buying declines in intensity with the calendar year, being greatest from the first-year to spring, then less pronounced from spring to autumn, then imperceptible from autumn to the year-end, after which there is recovery through the year-end back again to the midwinter calls. The period of freest purchase is from midwinter to spring and of greatest restraint from autumn to the year-end. In so far, the variation corresponds with the familiar seasonal fluctuation of currency demands.

Examining the average ratio of securities to total resources at seasonal dates the same general movement is traceable. The ratio increases from the first-year through the autumnal date, but the rate of gain is more rapid from first-year to summer than from summer to autumn, and is replaced by outright decline between the autumn and the year-end. Some part of this arrest is of course due to the inverse course of loans and discounts and other constituents of total resources. But the characteristic quality is imparted by variation in bond buying.

Call	Average per cent to resources	Average per cent gain over preceding call
No. 1 (first-year)	4.977	1.1 ¹
" 2 (spring)	5.025	1.0
" 3 (summer)	5.109	1.7
" 4 (autumn)	5.150	0.8
" 5 (year-end)	5.123	— 0.5

¹ Cf. note under preceding table.

V

Turning to the several groups of banks, the same general tendencies are evident as in the case of the banks in aggregate. The country banks, the reserve city banks, the central reserve city banks and the New York city banks have all invested an increasing proportion of their resources in securities, and the rate of such investment has varied more or less directly with prevailing business conditions. The ratios of net security holdings to total assets for the several banking groups at the autumn call in each year since 1883 are presented in the following table:

TABLE 5.—*Ratios of net security holdings to total assets by groups.*

Year	All	Country	Central	Reserve	New York
1883	2.99	3.59	2.82	1.78	2.84
1884	3.12	3.72	2.99	1.86	3.14
1885	3.18	3.82	2.86	2.10	2.96
1886	3.25	3.91	2.82	2.09	2.98
1887	3.38	3.96	3.34	2.09	3.49
1888	3.54	4.19	3.36	2.25	3.57
1889	3.64	4.23	3.52	2.42	3.68
1890	3.67	4.04	3.87	2.70	4.23
1891	3.89	4.26	4.12	2.86	4.44
1892	4.40	4.78	4.55	3.45	5.01
1893	4.77	5.34	4.86	3.50	5.21
1894	5.56	6.37	5.28	4.24	5.68
1895	5.69	6.63	5.24	4.22	5.81
1896	5.78	6.56	5.55	4.44	6.24
1897	5.63	6.73	5.01	4.20	5.54
1898	6.37	7.07	6.17	5.29	6.68
1899	6.88	7.96	5.90	6.12	5.99
1900	7.27	8.17	6.45	6.66	7.17
1901	7.87	9.07	6.25	7.66	7.11
1902	8.06	9.42	6.45	7.50	7.09
1903	7.94	9.14	6.61	7.14	7.82
1904	8.12	9.56	6.83	7.10	7.85
1905	8.49	10.08	6.91	7.46	8.08
1906	8.14	9.39	7.27	6.77	8.55
1907	8.44	9.34	8.38	6.88	10.20
1908	8.97	10.50	7.97	7.33	8.94
1909	9.22	10.95	8.12	7.37	9.36
1910	8.45	10.13	7.45	6.36	8.67
1911	9.59	11.08	9.34	7.26	11.31
1912	9.43	11.22	8.19	7.34	9.86

In the case of the groups of banks as with all the banks, the percentage ratio of securities to assets has increased without notable interruption. As against the five years since 1883, in the case of all banks, in which the percentage of securities was not greater at the autumn call than at the corresponding date of the year preceding, there have been six periods of arrest in the case of the country banks, eight in the case of the reserve banks, nine in the case of the central reserve banks, and eight in the New York city banks.

Of the several groups, the country banks have been the readiest investors in securities. The proportion of resources so employed by the country banks at the latest autumn date available (11.2 per cent on September 4, 1912) has never been equalled by any other banking group outside of the New York city banks, and only on one highly exceptional date by the New York city banks (11.3 per cent on September 1, 1911). More than this, in only two years (1907 and 1911) since 1892 have the country banks not held, at the autumn call, larger percentages of their assets in

bonds than any of the other groups—the larger ratios in both exceptional instances pertaining to the New York banks. Next to the country banks in ratio of security holdings to total resources have been the New York city banks. The reserve and central reserve follow at some distance thereafter, with the central reserve banks tending to forge ahead in consequence of the influence of New York.

The variation from year to year in the proportion of resources invested in securities has been more marked in the case of the groups of banks than of all banks, by reason of the smaller denominator. The percentage change from year to year for each group of banks is set forth in the following table:

TABLE 6.—*Annual percentage change by groups.*

Year	All	Country	Reserve	Central	New York
1884	4.3	3.6	4.4	6.0	10.5
1885	1.9	2.6	12.9	-4.3	-5.7
1886	2.2	2.3	-0.4	-1.3	0.6
1887	4.0	1.2	0.0	18.4	17.1
1888	4.7	5.8	7.6	0.5	2.2
1889	2.8	0.9	7.5	4.7	3.0
1890	0.8	-4.4	11.5	9.9	14.9
1891	5.9	5.4	5.9	6.4	4.9
1892	13.1	12.2	20.6	10.4	12.8
1893	8.4	11.7	1.4	6.8	3.9
1894	16.5	19.2	21.1	8.6	9.0
1895	2.3	4.0	-0.4	-0.7	2.2
1896	1.5	-1.0	5.2	5.9	7.4
1897	-2.5	2.5	-5.4	-9.7	-11.2
1898	13.1	5.0	25.9	23.1	20.5
1899	8.0	12.5	15.6	-4.3	-10.3
1900	5.6	2.6	8.8	9.3	19.6
1901	8.2	11.0	15.0	-3.1	-0.8
1902	2.4	3.8	-2.0	3.2	-0.2
1903	-1.4	-2.9	-4.8	2.4	10.2
1904	2.2	4.5	-0.5	5.3	0.3
1905	4.5	5.4	5.0	1.1	2.9
1906	-4.1	-6.8	-9.2	5.2	5.8
1907	3.6	-0.5	1.6	15.2	19.2
1908	6.2	12.4	6.5	-4.8	-12.3
1909	2.7	4.2	0.5	1.8	4.6
1910	-8.3	-7.4	-13.7	-8.2	-7.3
1911	13.4	9.3	14.1	25.3	30.4
1912	-1.6	1.2	1.1	-12.3	-12.8

The same general correspondence between bond buying and business activity noticeable in the case of all banks may be traced in the several banking groups. The years of large relative increase in security holdings have been periods of great business activity or of post-panic prostration. The years of small increase or relative decline have been periods of speculative reaction or of

business depression. In the following table comparison is made of the bonds acquired by the several banking groups in the years heretofore segregated, the percentages representing the averaged proportional increase, or decline, in the ratio of security holdings to total resources at the autumn call:

TABLE 7.—*Comparison of bond purchases in different years by banking groups.*

Periods	All	Country	Reserve	Central reserve	New York city
"Rapid" Periods					
1891-94	10.9	12.1	12.2	8.0	7.6
1898-01	8.7	7.8	16.3	6.2	7.9
1905	4.5	5.4	5.0	1.1	2.9
1908	6.2	12.4	6.5	-4.8	-12.3
1911	13.4	9.3	14.1	25.3	30.4
"Slow" Periods					
1895-97	0.4	1.8	-0.2	-1.5	-0.5
1902-04	1.0	1.8	-2.4	2.9	3.4
1906-07	-0.2	-3.6	-3.8	10.2	12.5
1909-10	-2.8	-1.6	-6.6	-3.2	-1.3
1912	-1.6	1.2	1.1	-12.3	-12.8

It will be seen that the country banks have followed without material change the course already traced of the banks in aggregate. In the case of the reserve city banks the contrasting variations are somewhat exaggerated, both gains and losses inclining to be greater than in the case of all the banks. The New York city banks, while corresponding in the main with the general movement, present abrupt departures in particular years, and this variation is reflected in the percentages of the central reserve banks by reason of the dominant influence of New York city. Thus in 1896, in 1903, in 1906-07, and in 1912, the reduction in loans and reserves of the New York city banks was much in excess of that of the country banks and even of the reserve city banks, with no correspondingly greater liquidation in bond investments—resulting in relatively higher ratios of securities to reserves in the case of the New York banks. On the other hand, in 1899 and again in 1901, while the country and the reserve city banks added notably to the relative importance of their bond holdings, the New York banks actually reduced their ratios.¹⁶

¹⁶ In 1907-08, both the post-panic increase and the subsequent decline in the relative importance of security holdings occurred earlier in the case of the New York city banks than of the other banking groups, so that the New

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The actual course of bond buying by the national banks, as set forth above, makes necessary some amendment of the explanation commonly advanced of such banking practice, and suggests some revision of public assent thereto as sound banking policy.

It appears that the banks have continuously devoted an increasing part of their resources to the purchase of bonds, in contrast to the movement of loans and discounts and cash reserves, until the amount so invested now practically equals their paid-in capital stock.

The occasions for such purchase, as evidenced by a comparison of alternating periods of rapid and slow acquisition, have been not only the accumulation of unemployed funds and the absence of other channels of profitable employment in periods of business prostration, but also the attractiveness and pressure of new security flotations by reason of syndicate participation, anticipated rise in value or mere corporate contacts, in times of business activity.

Securities so acquired fail notably to serve as a form of secondary reserve to meet the demands of expanding business or panic strain, being non-liquid either in seasonal or in cyclical requirement, in accordance with what might be designated the "lobster-pot" theory of customary purchase at high price levels and of reluctance to sell at low price levels.

This condition seems to call for remedial action—restrictive, on the one hand, in the form of some limitation upon the present complete freedom of the banks to make such investments, and positive, on the other hand, in the provision of more acceptable kinds of investment for unemployed funds. It is obviously inexpedient for the national banks designed as agencies of commercial loan and discount, to be permitted to tie up at inopportune periods increasing parts of their resources in what experience has shown to be practically immobile forms of investment—with consequent restraint upon lending power and greater costliness of commercial discount. In so far as the motive of such investment is the lure of larger interest return and of speculation for the rise, the practice is indefensible. In so far as the purchase of bonds

York ratio for 1907 is relatively larger and that for 1908 smaller, than elsewhere. In this connection and elsewhere, comparison of the security holdings of the several banking groups, distinguished with respect to sectional location, would be of much interest.

by the banks has grown up as an incident of modern corporate financing,—induced by the requirements of the corporations rather than by the necessities of the banks—the occasion itself is valid but the mode of its exercise improper. An essential function of an efficient money market is the temporary holding of security issues in the interval between original emission and definite absorption by investors. But this service cannot be economically undertaken nor adequately performed by commercial banks. Aside from matters of equipment and competence, there is an inevitable coincidence in time between the demand for such fiscal service and the requirement for ampler commercial accommodation—with the result of strain and cost to the credit-using community.

An outright prohibition of bond buying would under present conditions, leave the banks at recurring intervals with large amounts of idle money. It is at least an open question whether even under such conditions the advantage of larger reserves, greater elasticity in lending power, and lower discount rates would not compensate for the loss of idle money. But the occasion for such a weighing of advantage and disadvantage is removed by the reasonably certain prospect that impending currency legislation will for the first time give the banks an opportunity to constitute a true secondary reserve for the investment of idle money by authorizing the acceptance and rediscount of commercial paper. Accustomed as the banks are to bond buying and its accompanying incidents, it is doubtful whether the mere establishment of a discount market would of itself destroy existing practices. Coupled with restrictive legislation, the way would seem to be clear for the successful operation of both changes in banking procedure.

JACOB H. HOLLANDER.

Johns Hopkins University.

THE COST OF GOVERNMENT IN MINNESOTA

An investigation has recently been completed, by authority of the Minnesota Tax Commission, relating to the total cost of all grades of government, and also the cost in each of 326 incorporated places in Minnesota during the fiscal year 1911.¹ Some of the facts brought to light by this investigation, especially as to the variation of cost with size of city, are of sufficient theoretical interest to students of public finance to warrant a more extended analysis than could be given in an official report.

In most investigations of cost of government, expenditures have been taken as the measure of cost. If all governmental units of like grade had identical functions, this measure might serve, at least for the purpose of comparison. In point of fact, however, an extraordinary variety of functions is found, especially in the matter of municipal trading. One city owns water and light plants, a public market, an auditorium, and perhaps still other public service enterprises, which are financed chiefly, or it may be entirely, from the sale of commodities or services; another city has none of these things and relies exclusively on the proceeds of taxation. If expenditures be taken as the measure, the cost of government will necessarily appear to be enormously greater in the first city than in the second: yet the tax levy may be much lower in the city having the higher apparent cost of government. Moreover, it is perfectly apparent that what a man pays for water and light is no more a part of the cost of government than are his similar payments for groceries and dry goods; and this is equally true, whether the water and light plants are operated by a private corporation or by the city. No mere change in ownership of such enterprises can change the character of the consumer's expenditure; any more than the establishment of a municipal milk supply could suddenly transform another private household expenditure into a part of the cost of government. In all these cases the purchaser merely pays for value received, that is, for a commodity or a special service. The transaction is, therefore, purely private and commercial in character, irrespective of whether the seller be an individual, a private corporation, or a public corporation. Consequently, all forms of municipal trading figure in the cost of government only in the event and to the extent that they fail to be self-supporting and become a charge on the general revenues.

¹ "The Cost of Government in Minnesota," by E. V. Robinson, ch. 15 (pp. 242-287) of the *Report of the Minnesota Tax Commission* (St. Paul, 1912).

In like manner, when a man pays a special assessment for a ditch, or sewer, or sidewalk, he is helping to pay for a public improvement which is supposed to increase the selling value of his property by at least the amount of his assessment. In case it does this, he gets back, in another form, all that he pays. Only in case he is assessed more than the benefit to his property is he taxed at all, while in all cases where he is assessed less than the benefit to his property, he actually profits by the transaction. It is clear, therefore, that special assessments, unless in excess of benefits to the property, are not a part of the cost of government.

For these reasons, it is essential, in order really to arrive at a common measure of the cost of government, to keep the finances of public service enterprises distinct from general public finances; and also sharply to separate special assessments from taxes, special assessment loans from general loans, and interest payable on special assessment loans from interest on general loans.

Owing to the foregoing considerations, receipts of local coercive revenues—taxes, licenses, fees and fines, paid within the area governed—were taken as the measure of the cost of government in Minnesota. This measure, it is true, does not show how rapidly debt is being piled up: but neither would a statement of expenditures show the relation between general revenues or ordinary receipts, on the one hand, and payments for current expense and interest, on the other. In order to bring out this relationship, which is the really vital thing in connection with debt, the ratio of current expense and interest to general revenues (exclusive of commercial receipts and special assessments) was calculated for each of the 143 municipalities having over 1,000 population. The cost of government measured by coercive revenues, and the per cent of current expense and interest to general revenues, taken in connection with one another reveal the character of the financial operations of the year at a glance.

The usual practice has been to employ only the per capita basis for comparison, owing to the lack of reliable data as to the true valuation of property. This is the case with the census statistics of cities, and with most if not all of those published by the various states. In Minnesota, however, the tax commission had for some years compiled records of real estate sales, including about 250,000 transfers. These records from January 1, 1910, to January 1, 1912, were used to find the ratio of assessed to true valuation of real estate in each city and village, each county, and in the state as a whole. The true valuation of all property was then obtained

by employing a fixed ratio (28 per cent) of assessed to true valuation for all personal property actually appearing on the tax rolls, aside from money and credits which are taxed at a different rate. In this way it becomes possible to compare the costs of various grades and units of government with reference not only to population but also to wealth.

On applying the methods outlined above, the cost of all grades of government to the taxpayers of Minnesota, during 1911, was found to have been as indicated in the following table (p. 818). Items I and II refer to disbursements; items III and 4 (under D) to the burden borne by taxpayers. The essential difference between item III and item 4 is that the former includes the general property tax, federal taxes, gross earnings taxes, licenses, fees, and fines; while item 4 includes only the proceeds of the general property tax and federal taxes. Diagram 1 is based on item III of the table; diagram 2, on item 4.

The returns for individual cities given in the chapter on cost of government represent a consolidation of city accounts with those of school districts and, in many instances, with the transactions of independent municipal boards. Such consolidation presented difficulties owing to the fact that the school districts seldom exactly coincide with the municipality. In some cases a city contains three or four school districts. More often the district is larger than the city; and in some instances one district covers twenty or thirty townships and includes a considerable number of cities and villages. The object of such an arrangement is to compel outlying iron-ore lands to help maintain the schools. Wherever municipal and district boundaries were found not to coincide, the method of procedure was as follows: (1) to total the receipts and the payments of all school districts containing any part of the municipality; (2) to ascertain the assessed valuation of the district or districts, on the one hand, and the municipality on the other; (3) to obtain the ratio of municipal to district valuation; (4) to take the same per cent of the joint district receipts and payments respectively. The resulting sums indicate with substantial accuracy, it is believed, what was actually collected and spent within the city or village for both municipal and school purposes. The same plan was used in consolidating the outstanding debts and the annual interest charges of cities and districts.

Previous investigations have shown that, on the average, the cost of government increases faster than the size of the city. The same relation is also found to exist in Minnesota, as shown by

TABLE 1.—*Cost of all grades of government, in 1911, to taxpayers of Minnesota. (Report of Minnesota Tax Commission, 1912, page 279.)*

Items	Local	County	State	Federal ¹	All grades
A. Amount for each grade of government:					
I. Total payments (including duplications) . . .	\$47,518,000	\$41,787,000	\$16,598,000	\$21,759,000	\$127,664,000
II. Net " (excluding ") . . .	46,714,000	9,312,000	10,911,000	20,927,000	87,866,000
III. Cost to taxpayers (total coercive revenues) . . .	26,760,000	5,853,000	9,315,000	14,779,000	56,708,000
B. Per cent for each grade of government:					
I. Total payments (including duplications) . . .	37.2	32.7	13.0	17.1	100
II. Net " (excluding ") . . .	53.2	10.6	12.4	23.8	100
III. Cost to taxpayers (total coercive revenues) . . .	47.2	10.3	16.4	26.1	100
C. Per Capita for each grade of government:²					
I. Total payments (including duplications) . . .	\$22.55	\$19.83	\$7.88	\$10.83	\$60.59
II. Net " (excluding ") . . .	22.17	4.42	6.18	9.93	41.70
III. Cost to taxpayers (total coercive revenues) . . .	12.70	2.78	4.42	7.01	26.91
D. Cost to taxpayers measured by area, true valuation, capitalistic income, and average family:					
1. Cost to taxpayers per square mile	\$330.95	\$72.39	\$115.21	\$182.78	\$701.83
2. Cost to taxpayers per \$10,000 true valuation . .	71.71	15.69	24.96	39.61	151.97
3. Per cent which cost was of income from } . . .	11.1	2.4	3.9	6.2	23.6
total wealth at 5% interest. ³					
4. Cost to family of five on \$3,000 of real estate } and \$1,000 of personal property (true valua- } tion) under general property tax and federal } taxes. ⁴	\$24.41	\$6.08	\$4.59	\$35.05	\$70.13

¹ Proportionate share of Minnesota on basis of population in 1910 (U. S. 91,972,266; Minnesota 2,075,708—2.237 per cent).² Based on estimated population of 2,107,042 in 1911 (Table I, ch. 15, *Report of the Minnesota Tax Commission, 1912*).³ Estimated wealth in 1911, \$4,796,399,264 (Analysis Table D, ch. 15, *ibid.*).⁴ At average ratio of assessed to true valuation for real estate (33.4 per cent) and personal property (28 per cent) less exemption of \$100—\$1,182.30 assessed valuation, and average tax rate (29.67 mills) which prevailed in state in 1911; distributed as per state auditor's abstract of tax lists, viz.: state taxes 3.08 mills; county taxes, 5.14 mills; and local taxes, 20.65 mills.

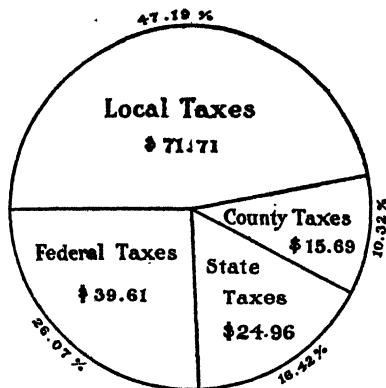


Diagram 1: Cost of all grades of government in 1911 to taxpayers of Minnesota, per \$10,000 of true valuation.

Total cost \$151.97.

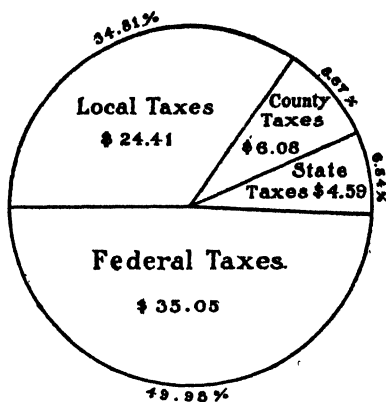


Diagram 2: Cost of all grades of government in 1911 to family of five in Minnesota, owning \$3,000 of real estate and \$1,000 of personal property, at average ratio of assessed to true valuation and average tax rate prevailing in the state. This diagram excludes state corporation taxes, licenses, fees and fines.

Total cost to family of five \$70.13.

Table 1 and diagrams 1 and 2 of course include only taxes received by the government, not the tribute paid to protected industries by consumers because of the protective tariff. How much this is cannot be ascertained. However, if such tribute bears approximately the same relation to the customs revenue of the government that the volume of domestic commerce does to the volume of foreign commerce (estimated at 12 to 1), then the family of five, represented in diagram 2, paid to protected interests \$168.44 against \$70.13 for the support of all grades of government. Any assumption of this sort is, of course, highly uncertain; but it may be noted that on this basis, the total burden borne by a family of five in Minnesota owning \$4,000 worth of property would amount to \$238.57; and that of this sum, 70.61 per cent would be for the support of protected industries.

the higher per capita cost in the larger cities. The explanation of this fact is presumably the greater number of things which the larger city does for the safety, health, and comfort of the citizen—things which in smaller municipalities are either done by the citizen himself or are not deemed necessary. It may be noted that an increasing cost per capita with increase of population is therefore not at all inconsistent with the assumption that municipal activities severally conform to the law of diminishing expense which would be expected to obtain in similar undertakings under private management,

On the other hand, it appears from this investigation that in Minnesota, at least, the cost of municipal government increases much less rapidly than wealth. In other words, while average cost per capita varies directly, average cost measured by true valuation varies inversely, with the population.

For example, in the three large cities in the state, the cost of city government (including schools) based on true valuation, varied inversely with size: being \$104.02 per \$10,000 true valuation in Minneapolis; \$110.16 per \$10,000 true valuation in St. Paul; \$112.68 per \$10,000 true valuation in Duluth. Maintenance charges for government in general and public service enterprises also varied inversely with the size of the city, being least in Minneapolis and greatest in Duluth. So likewise did total maintenance charges and interest, which constitute the expenditures for current government. The amount was, for Minneapolis, \$107.49, for St. Paul, \$123.57, and for Duluth, \$124.12 on each \$10,000 of true valuation.

Maintenance charges for health and sanitation, unlike maintenance in general, varied directly with size, the figures being \$9.62 for Minneapolis, \$8.86 for St. Paul, and \$4.63 for Duluth, on each \$10,000 of true valuation. A similar gradation exists on the basis of population, the per capita expenditures being \$1.59 in Minneapolis, \$1.20 in St. Paul, and \$0.79 in Duluth. Such striking variation of health and sanitation charges with the size of the city apparently testifies to the seriousness of the health problems which arise from the crowding together of a large population in a limited area.

It is, however, in the relation of average costs for the several classes of municipalities that the most significant facts appear, as shown by the table on the following page. Class 1 as here used includes Minneapolis, St. Paul, and Duluth; class 2, 17 cities and villages between 20,000 and 5,000 population; class 3, 23 cities and villages between 5,000 and 2,500; class 4, 89 cities and villages between 2,500 and 1,000; and class 5, 178 villages having less than 1,000 population. In all cases it was necessary to eliminate the mineral cities, since their huge valuations and high per capita costs would render all averages meaningless. True valuations were not calculated for class 5. The figures for this class consequently had to be gotten by various indirect methods and are therefore less reliable than those given for classes 1 to 4, inclusive.

The same relation of cost to size is thus found between the

TABLE 2.—Showing the average relation of size of city to cost of government in 310 cities and villages of Minnesota, excluding those having mineral valuations.

	Average Class 1	Average Class 2	Average Class 3	Average Class 4	Average Class 5
Cost to local taxpayers					
per \$10,000 true valuation	\$107.20	\$127.10	\$133.83	\$135.85	.. 19.72
per capita	16.65	12.01	11.42	11.27	
Payments for maintenance and interest					
per \$10,000 true valuation	\$114.94	\$158.90	\$192.08	\$190.25	.. 13.42
per capita	17.86	15.08	16.39	15.79	
Ratio of maintenance and interest to revenue	74.9	79.4	83.1	88.3	.. . . .
Receipts from public service enterprises					
per \$10,000 true valuation	\$15.37	\$34.95	\$63.24	\$45.44	.. 0.97
per capita	2.39	3.30	5.40	3.77	
Per cent of public service payments covered by receipts	86.2	88.0	81.6	72.6	67.4
Per cent of assessed to true valuation	38.77	32.79	30.92	30.17	.. . . .
True valuation per capita	\$1553.99	\$945.26	\$853.50	\$829.79	.. . . .
True tax rate (city and school)	9.36 mills	10.38 mills	9.66 mills	10.40 mills	.. . . .
Per cent of net debt to true valuation	3.6	2.9	3.4	3.1	.. . . .
Per cent of net interest to levy for city and schools	13.6	13.1	16.3	14.0	.. . . .

¹ Estimated. See page 382 (ch. 15), *Report of Minnesota Tax Commission, 1912.*

² Calculated from the per cent of maintenance and outlays for schools in class 4 and the figure (\$5.66) found for maintenance and interest in class 5, exclusive of schools.

several classes as between the three large cities. Cost per capita rises from \$11.27 in class 4 to \$16.65 in class 1; cost per \$10,000 of true valuation, on the other hand, decreases from \$135.85 in class 4 to \$107.20 in class 1. Moreover, there appears to be good reason for believing that more of personal property evades taxation in the larger than in the smaller cities; and since the true valuation used in this calculation takes account only of such personal property as actually reaches the tax rolls, the relative decrease of cost with increasing size of city, if measured by the true valuation of all property, would be much more rapid than the above figures indicate.

In like manner, payments for maintenance and interest decrease from \$190.25 in class 4 to \$114.94 in class 1, per \$10,000 of true valuation. The regularity of the gradation is, however, broken by class 3, which has \$192.08 against \$190.25 in class 4. This irregularity is due to the extraordinary extent to which municipalities in class 3 have gone into the management of public utilities, as shown by the receipts from public service enterprises.

The ratio of maintenance and interest to revenue decreases regularly from 88.3 per cent in class 4 to 74.9 per cent in class 1. Again, the per cent of payments for public service enterprises, which is covered by receipts from that source, is least (72.6) in class 4, and increases with the size of the city.² Both of these facts seem to indicate greater economy and efficiency of administration in the larger cities, and to suggest that the law of decreasing expense applies both to regular municipal activities and to the conduct of public utilities, precisely as would be expected under private management. It may be remarked, however, that the ratios given in the table do not allow for principal or interest of public service bonds. If these were included it is likely that the proportion of public service payments met by such receipts would not exceed 50 per cent, on the average, for all municipalities reported.

The ratio of assessed to true valuation rises from 30.17 per cent in class 4 to 38.77 per cent in class 1. But the true valuation per capita increases much faster, going from \$829.79 in class 4 to \$1,553.99 in class 1. As a result the true tax rate for municipal and school purposes is highest in class 4 and lowest in class 1. Class 2, however, is somewhat irregular, showing a higher true

² The ratio of 86.2 in class 1 against 88 in class 2 was due to very heavy outlays for the new filtration plant in Minneapolis and does not represent normal conditions.

tax rate and a lower ratio of debt to true valuation than size would lead one to expect. The apparent explanation is that cities of this class (20,000-5,000) have been compelled to face many of the same urban problems as the three large cities in class 1, though without resorting to as free a use of public credit.

The per cent of net debt to true valuation and the per cent of net interest to tax levy for city and school purposes are higher in the larger than in the smaller cities, with only the irregularity just noted as to class 2. So far as it goes, this fact of course tends to offset the lower cost of government to present taxpayers in the larger municipalities.

So many and such striking variations with size convey a tantalizing suggestion of some regular relation, capable of mathematical formulation, between population, true valuation, and cost of government. The method of empirical curves cannot be used successfully owing to the great gap between classes 1 and 2. The ratio plan yields the results indicated in table 3.

According to table 3, the per capita cost of government increased 8.08 cents for each 1,000 additional population, between classes 4 and 3 (1,570 to 3,427 population); 11.67 cents between classes 3 and 2 (3,427 to 8,483 population); and 2.37 cents between classes 2 and 1 (8,483 to 204,068 population): the weighted average of the three amounts being 2.65 cents.⁸ These amounts translated into per cents become respectively 0.717, 1.022, and 0.197; the weighted average of the three rates being 0.222 per cent. In view, however, of the fact that an increase of 1,000 in population imposes a much greater strain on a small than on a large municipality, a proportional plan seems likely to be more nearly accurate. On this basis, each 10 per cent increase in population involved an increase in per capita cost of government of 1.27 cents between classes 4 and 3, 4 cents between classes 3 and 2, and 2.01 cents between classes 2 and 1; the weighted average being 2.09 cents. Stated as rates, these increases become respectively 0.113, 0.350, and 0.167 per cent; the weighted average of the three rates being 0.175 per cent.

⁸ Owing to the great difference in the intervals separating the several classes of municipalities, a simple average of the increases in cost for each 1,000 additional population would have little significance. The average given (2.65 cents) is therefore calculated by weighting the several rates of increase in proportion to the extent of the intervals over which such rates apply; that is, using 8.08 cents .357 times, 11.67 cents .506 times, etc. The same principle is followed in calculating the other weighted averages in this table.

TABLE 3.—Effect of size of city on true valuation and on cost of municipal government, in Minnesota, fiscal year 1911.

	Class 4 ¹	Class 3 ¹	Class 2 ¹	Class 1	Totals	Averages
I. Number of municipalities included ¹	89	23	17	9	132	38
II. Total population, 1911 ²	139,686	78,814	144,309	612,205	974,914	7,386
III. Average population of municipalities, 1911.....	1,570	3,427	8,483	204,063	\$1,270,855,131.00	
IV. Total true valuation, 1911 ³	\$115,910,674.00	\$67,267,684	\$136,915,357	\$351,361,496	\$14,465,404.96	
V. Total cost of government, 1911 ³	\$1,574,661.13	\$900,245.02	\$1,732,507.52	\$10,196,496.49		
VI. Cost per capita ⁴	\$11.27	\$11.42	\$12.01	\$16.65	\$5.38 ⁵	\$14.78
Increase in cost per capita.....		\$0.15	\$0.59	\$4.64		
(1) for each 1,000 population.....		\$0.0808	\$0.1167	\$0.0237		\$0.0265
(a) amount of increase in cost ⁵		0.717	1.022	0.197		0.222
(2) per 10 per cent increase in population.....						
(a) amount of increase in cost ⁶		\$0.0127	\$0.0400	\$0.0201		0.0209
(b) per cent of increase in cost ⁶		0.113	0.350	0.167		0.175
VII. True valuation per capita ⁴						
Increase in true valuation per capita.....						
(1) for each 1000 population.....	\$229.79	\$353.50	\$945.28	\$1553.99	\$724.20 ⁵	\$1503.56
(a) amount of increase in valuation ⁷		\$23.71	\$91.76	\$608.73		
(2) per 10 per cent increase in valuation ⁸						
(a) amount of increase in valuation ⁹		\$12.77	\$18.15	\$3.11		\$3.57
(b) per 10 per cent increase in population.....		1.539	2.127	0.329		0.355
(3) per 10 per cent increase in valuation ⁹						
(a) amount of increase in valuation ⁹		\$2.00	\$6.22	\$2.64		\$2.92
(b) per cent of increase in valuation ⁹		0.241	0.729	0.279		0.303
VIII. Ratio between ratios of increase in cost per capita and increase in true valuation per capita.....						
(1) for each 1000 population ¹⁰		46.59	48.05	59.88		57.66
(2) per 10 per cent increase in population ¹⁰		46.47	48.01	59.86		57.76
IX. Cost per \$10,000 true valuation ⁶						
Decrease in cost per \$10,000 true valuation.....	\$155.35	\$153.83	\$127.10	\$107.20	\$28.65 ¹⁰	
(1) for each 1000 population.....		\$2.02	\$6.73	\$19.40		
(a) amount of decrease in cost ¹¹		\$1.09	\$1.83	\$0.10		\$0.14
(b) per cent of decrease in cost ¹¹		0.802	0.994	0.079		0.108
(2) per 10 per cent increase in population.....						
(a) amount of decrease in cost ¹²		\$0.17	\$0.46	\$0.09		\$0.11
(b) per cent of decrease in cost ¹²		0.125	0.344	0.071		0.089

¹ Excluding the mineral towns.

² Weighted in proportion to the intervals between classes.

³ From analysis table K, *Report of Minnesota Tax Commission*, 1912. ⁴ From analysis table J, *ibid.* ⁵ From table X, I, A, a, b, c, e, (less mineral towns), *ibid.*

⁶ From table 2. ⁷ The ratio of VI (1) b to VII (1) b.

⁸ The ratio of VI (2) b to VII (2) b. ⁹ Total increase between classes 4 and 1.

¹⁰ Total decrease between classes 4 and 1.

It is perhaps significant that the rate of increase in per capita cost for each 10 per cent increase in population rises from 1.27 cents between classes 4 and 3 to 4 cents between classes 3 and 2, and declines again to 2.01 cents between classes 2 and 1. This sharp upward turn in the per capita cost of municipal government is no doubt due to the first contact with true urban problems; and it presumably extends considerably beyond the 8,483 size, though the enormous gap between classes 2 and 1 in Minnesota (8,483 to 204,068) prevents a definite solution of this problem. That this upward "bulge" extends even beyond the 30,000 size, however, is indicated by the fact that group IV, as reported by the Census Bureau, shows a per capita cost slightly higher than group III. In view of this high rate of increase during the first part of the interval, and the fact that the average increase between classes 2 and 1 is only 2.01 cents, it follows that the rate of increase must fall below 2.01 beyond 100,000 population, and probably approaches 1 cent increase per capita for each 10 per cent increase in population, as the 200,000 size is approached. Corroborative evidence on this point is found in the rate of 1.356 cents between groups III and II (70,829 to 159,632 population) as reported by the census for 1910 (table 4).

This decreasing rate of increase in the per capita cost of municipal government, in spite of constant expansion of municipal functions with increase of population, would seem to suggest that municipal activities obey the law of diminishing expense or increasing returns.

Using the same methods, the true valuation per capita is found to increase for each 10 per cent increase in population \$2.00 or 0.241 per cent between classes 4 and 3; \$6.22 or 0.729 per cent between classes 3 and 2; \$2.64 or 0.279 per cent between classes 2 and 1. Here again, as in the case of per capita costs, the transition to true urban conditions is marked by a sharp rise in the rate of increase; but this rise is more pronounced in true valuation than in per capita costs. On the average, for all classes, each 10 per cent increase in population is marked by an increase of \$2.82 or 0.303 per cent in true valuation per capita.

Comparing these several rates of increase (part VIII, table 3), it appears that for each 10 per cent increase in population, the increase of per capita cost averaged only 57.76 per cent of the increase in true valuation of property actually listed on the tax rolls. In other words, allowing for property not listed, it is safe to say that per capita wealth in Minnesota increases from small

to large cities, approximately twice as fast as per capita cost of municipal government.

It should be noted, however, that while between classes 4 and 3 the per capita cost increases only 46.47 per cent as fast as the per capita valuation, the corresponding rate of increase is higher the larger the municipalities, being 59.86 per cent between classes 2 and 1. This fact may indicate that cost of government tends to overhaul true valuation in the largest urban centers. On this account, as well as for many other reasons, it is greatly to be desired that the Census Bureau should form a separate group of the great cities—say those in the million class—so that the analysis of the relation of cost of government to population and wealth may be made more complete.

In view of these different rates of increase of cost and valuation, the cost of municipal government measured by true valuation necessarily decreases as the population increases. The decrease in cost on each \$10,000 of true valuation is \$2.02 between classes 4 and 3, \$6.73 between classes 3 and 2, and \$19.90 between classes 2 and 1. These amounts are equivalent to a decrease for each 10 per cent increase in population, of \$0.17 or 0.125 per cent between classes 4 and 3; \$0.46 or 0.344 per cent between classes 3 and 2; and \$0.09 or 0.071 per cent between classes 2 and 1. The weighted average decrease in cost of government, measured by true valuation, was thus \$0.11 or 0.089 per cent for each 10 per cent increase in population. Between classes 3 and 2, where the increase in per capita cost is most marked, the decrease in cost measured by true valuation is still more pronounced because it is precisely at this point that the true valuation rises most rapidly. The coming of distinctly urban conditions, which impose new burdens on municipal governments, thus augments property values so greatly that the new burdens are borne more easily than the old.

By way of summary it may be pointed out that each increase of 10 per cent in population in the cities and villages of Minnesota, on the average, is accompanied by the following changes stated on the per capita basis:

	Amount of change	Per cent of change
	Cents	
Increase in cost	2.09	0.175
Increase in true valuation	2.82	0.803
Decrease in cost per \$10,000 true valuation	11.00	0.089

Groups, IV, III, and II of the census classification are intermediate as to average size between class 2 and class 1 in Minnesota (table 3). They are also intermediate in cost per capita, as appears from the following tabulation:

Table 4.—*Per capita cost of government.*

Class or group	Average population	Per capita cost
Class 4, Minnesota	1,570	\$11.27
Class 3, "	3,427	11.42
Class 2, "	8,488	12.01
Group IV, United States	37,805	13.02
Group III, " "	70,829	13.00
Group II, " "	159,632	14.70
Class 1, Minnesota	204,068	16.65
Group I, United States	844,106	23.85

For the sake of comparison, a table is here presented, based on the 1910 census, of all cities in the United States having over 30,000 population. Group IV includes 75 cities between 30,000 and 50,000 population; group III, 59 cities between 50,000 and 100,000; group II, 32 cities between 100,000 and 300,000; and group I, 18 cities over 300,000 population.

The federal groups, like the classes in Minnesota, show an increase in per capita cost with size of city except between groups IV and III. This irregularity, like the one noted in table 3, suggests that there may be certain sizes which call for a new and more expensive type of municipal plant and administration—in other words, which temporarily bring into operation the law of increasing expense; and that thereafter, with continued increase of size, the economy of large-scale operation again makes itself felt to the extent of checking, temporarily, the increase of per capita cost and presumably causing a sharp drop in the cost measured by true valuation.

Again, the increase in per capita cost between groups III and II (item VI (2) under group II, table 5) is 13.56 cents or 1.043 per cent, corresponding closely to the rate suggested by the Minnesota figures for cities of this size; while between groups II and I, the increase in per capita cost is 21.34 cents or 1.452 per cent. This fact suggests that just as the interval between class 3 and class 2 marking the transition to urban conditions is signaled by

TABLE 1.—*Sh effect on city on valuation and on cost of municipal government the ratios established for Minnesota.*

United Sta

ing

	Group IV	Group III	Group II	Group I	Totals	Averages
I. Number of municipalities in group ¹	75	59	32	18	184	46
II. Total population, 1910.....	2,335,354	4,178,916	5,108,367	15,198,901	27,316,407	148,459
III. Average population, 1910.....	31,005	70,329	159,632	844,106	\$528,702,629	
V. Total cost of government, 1910 ²	\$36,908,576	\$54,337,235	\$75,136,101	\$262,320,557		
VI. Cost per capita ³	\$18.02	\$19.00	\$14.70	\$23.85		19.35
Increase in cost per capita.....			\$9.16	\$0.181	\$10.35	
(1) for each 1,000 population.....			\$0.0191	0.089		0.0193
(a) amount of increase in cost ⁴			\$0.1856	\$0.2134		0.096
(b) per cent of increase in cost ⁴			1.043	1.433		\$0.1963
(c) amount of increase in cost ⁴						1.859
(b) per cent of increase in cost ⁴						\$2,517.79 ⁵
VII. True valuation per capita ⁶	\$1,056.45	\$1,159.16	\$1,415.33	\$2,544.06		
Increase in true valuation per capita.....		\$102.71	\$276.17	\$2,128.73	\$2,507.61	
(1) for each 1,000 population.....		\$3.11	\$3.11	\$3.11		\$3.11
(a) amount of increase in valuation ⁴		0.300	0.273	0.220		0.229
(b) per cent of increase in valuation ⁴		\$11.76	\$22.04	\$19.64		\$30.09
(c) amount of increase in valuation ⁴		1.155	1.934	3.507		2.376
(b) per cent of increase in valuation ⁴						
VIII. Ratio between ratios of increase in cost per capita and increase in true valuation per capita : (1) for each 1,000 population ⁷			53.55%	40.45%		41.79%
(2) per 10 per cent increase in population ⁷			53.93%	41.40%		47.25%
IX. Cost per \$10,000 true valuation ⁸	\$124.17	\$120.87	\$111.99	\$153.54		\$76.87 ⁹
Decrease in cost per \$10,000 true valuation.....		\$3.30	\$8.83	\$68.45	\$30.63	
(1) for each 1,000 population.....		\$0.10	\$0.10	\$0.10		\$0.10
(a) amount of decrease in cost ⁴		0.031	0.033	0.039		0.033
(b) per cent of decrease in cost ⁴						\$1.26
(c) amount of decrease in cost ⁴		\$0.33	\$0.71	\$1.60		1.117
(b) per cent of decrease in cost ⁴		0.306	0.537	1.429		

From table 1, *Census Report on Financial Statistics of Cities over 30,000 in 1910*.

From table 3, *ibid.*, including taxes, licenses and permits, fines, etc.

From table 25, same report and items as 1.

Weighted in proportion to the intervals between groups.

Based on rate of increase in true valuation established between classes 1 and 2 in Minnesota, starting with the same true valuation per capita, at the size as in class 2, table 3.

The total true valuation of the four groups, calculated as under 5, divided by the total population.

See table 8, footnotes 1 and 2.

Based on rate of decrease in cost between classes 2 and 1, found in table 8.

The total cost for the 4 groups divided by the total true valuation, obtained according to footnote 5.

a sharp rise, this still more striking rise in per capita cost is due to the transition from ordinary urban to metropolitan conditions, which again imposes the necessity of providing a more expensive type of municipal plant and administration.

The question arises: Since the census figures for per capita cost in cities over 30,000 correspond so closely to the results in Minnesota that both sets of figures can be arranged in a single ascending series (table 4), are we warranted in assuming that true valuation in these cities outstrips the per capita cost as much as it does in Minnesota? If so, it would follow that the cost of government measured by true valuation would show a corresponding decrease. In order to bring out the effects of such a variation of true valuation with size, sections VII, VIII, IX of table 5 have been prepared. These figures, which are printed in italics to indicate that they are purely hypothetical, are based on the per capita valuation shown for class 2 and the rate of increase between class 2 and class 1 in table 3. According to these figures, there would be for each 10 per cent increase in population a decrease of \$0.38 or 0.306 per cent between groups IV and III; of \$0.71, or 0.587 per cent, between groups III and II; and of \$1.60, or 1.429 per cent, between groups II and I, in the cost of municipal government resting on each \$10,000 of true valuation. If the cities of over 1,000,000 population were put in a separate group, this decrease in cost measured by true valuation would run to highly significant and even startling figures; unless, indeed, cost of government overhauls true valuation.

In the absence of statistical corroboration as to the true valuations outside of Minnesota, it is not safe to place overmuch confidence in this portion of table 5, especially in so far as concerns group I. For this reason, these figures are published less as a solution than as a statement of the problem. If several of the states which employ the sales method of valuing real estate for purposes of taxation should calculate and publish true valuations by municipalities, and if the Census Bureau should make a separate group of the cities of over 1,000,000 population, it would be possible to draw curves showing the average relation of per capita cost, true valuation, and cost measured by true valuation, for each size of municipality. Such a result would certainly be of great interest and value, both theoretical and practical. It is, of course, possible that such statistical data would reveal some size of city which gives the maximum of efficiency, or of true valuation

per capita ; but if such is the case, it must be somewhere in group I. On the whole, and barring this possibility, the Minnesota figures seem to show that as cities grow larger, wealth increases practically twice as fast, on the average, as the per capita cost of municipal government.

In a sense, this conclusion is reassuring, but it suggests that this economic advantage tends constantly to make the great city greater still. Certainly the Minnesota figures give no support to the theory that increasing cost of city government will set a limit to the continued and ever increasing congestion of population in urban centers, which imposes the necessity of human adaptation to what is, in effect, a wholly new environment.

EDWARD VAN DYKE ROBINSON.

University of Minnesota.

THE EXPRESS CHARGES PRESCRIBED BY THE INTERSTATE COMMERCE COMMISSION

In an earlier article,¹ the writer described the more important objects of complaint against the rates and practices of express companies that have prevailed heretofore; stated the remedial changes, reached in some cases with the coöperation of the companies, that are applicable to the practices and methods of handling the traffic; discussed more fully the arguments urged in support of the complaints against the present classification, rates, and charges; and stated the general plan proposed by the Interstate Commerce Commission for dealing with these complaints. Because, at the time of writing, the case was not closed before the commission, a discussion of the specific schedule of charges proposed by the commission and the specific criticism of that schedule on the part of express companies and shippers was left until a later time. The case has now been finished and the commission has given its decision, under date of July 24, 1913.²

The schedule prescribed by the commission, effective October 15, is a complete revision of the whole structure of express rates. The commission went to this length because, in its opinion, the interdependence of all rates and charges stood in the way of satisfactory relief from the rates complained of without a readjustment of the whole schedule.³

Basis of Interstate Commerce Commission's Rate Schedule

It becomes at once a matter of considerable interest to know upon what basis or principle the commission proceeded in constructing its brand-new structure of charges. The commission considered a number of bases that have been urged, including:

(1) The return on the investment; (2) the capitalization of the companies; (3) the earnings; (4) the operating expenses; (5) first-class freight rates; (6) passenger rates. In addition, the commission endeavored to reach some common understanding in this matter with the express companies.

¹ "The Rates and Practices of Express Companies," *AMERICAN ECONOMIC REVIEW*, vol. III (June, 1913), pp. 314-340.

² "In the Matter of Express Rates, Practices, Accounts, and Revenues," 28 *Interstate Commerce Commission Reports*, p. 131.

³ 24 *Interstate Commerce Commission Reports*, pp. 433-434.

The conferences developed, however, that no common ground could be found owing to the impossibility of acceptance by the commission of the percentage contracts between the express companies and the rail carriers as making a legal or moral necessity for higher rates than could be justified otherwise.⁴

The companies press their contention in this matter, because of the bearing of the percentage form of railway compensation on the express companies' revenue from shipments weighing less than 100 pounds. This is explained by the commission thus:

While such packages must have rates based upon weight, yet as they move as separate shipments with individual pick-up and delivery service, each must pay for such service as an individual shipment. The amount of such service varies but slightly with the weight of the package and not at all with the length of its rail journey. It is entirely performed by the express carrier, yet the demand is that shippers shall be compelled to pay upon such packages rates sufficiently high to yield to the express carrier, out of a division ranging from 35 per cent to 60 per cent, an amount sufficient to compensate it. Every addition to the rates paid by the shipper for such service as distinguished from the line haul is cut in two by the contracts and must be approximately doubled if the express carrier is to be compensated.

Likewise, in the case of rates for long distances, the service performed by the rail carrier, especially on shipments of large weight, is relatively much greater than that performed by the express company. As to these rates, the contention is that full compensation for the rail carrier must be found in half or less than half thereof.⁵

The commission's inquiries in this matter led to no satisfying principle upon which to construct its completely new rate structure. The commission expresses the judgment that there is no one test of reasonableness. But it gives its conclusions as follows:

(1) That express rates should be made primarily to meet the need of the great body of our people and should therefore be stated in terms that represent the small packages which the express company is intended to carry rather than by the 100 pounds as freight rates are stated.

(2) That in the fixing of its rates an express company should not be allowed to charge more than a railroad company if the latter undertook to, and did, give the same service.

(3) That it is proper for the government to treat the express company as a freight forwarder by passenger train, giving supplemental service at each terminus, and intermediate care.

(4) That an express rate may not be based upon the monopoly right of the express company to be the exclusive freight forwarder over one or more lines of railroad.

⁴ 28 *Interstate Commerce Commission Reports*, p. 140.

⁵ *Ibid.*, p. 141.

(5) That the rates should not include more than a reasonable compensation for the service given, even though such compensation falls below that which the railroad exacts as a minimum for the carrying of 100 pounds of freight.

(6) That it is unreasonable to fix as rapid a decline in express rates for long distances as is made by the railroads in their freight rates, express service in this respect being more analogous to passenger than to freight service.

(7) That in compounding the express rates the railroads should be allowed a compensation for bulked freight moved upon a passenger train as to which it is relieved by contract from all liability for loss or damage and is without expense for the furnishing of a receipt, the billing, the bookkeeping, and a great number of other general expenses.

(8) That the rates should include a return to the express company which will compensate it with profit for the expense of the service which it gives, there being added thereto in the formation of the total rate the proper charge which it may reasonably make for the service which the railroad gives, as stated in the preceding paragraph.*

Method of Constructing the Commission's Rates

In view of the rather indefinite results of the search for a basis of rate making, it is of considerable interest to know just how the commission proceeded in preparing the schedule prescribed by it. It is clear from an analysis of the schedule itself that the charges are computed in some regular manner. But the commission does not publish in its opinion any description of its process, nor does it indicate the relative weight given to different considerations in making up its charges. However, in the response of the express companies on October 9, 1912, to the commission's order of June 8, the five leading companies say:

The commission has advised these respondents that the rates it has proposed have been arrived at upon the following basis:

The rate for a package of any weight is based upon an arbitrary allowance of 20 cents for the handling of the package by the express company or companies, regardless of the weight of the package, plus an additional charge which varies directly with the weight of the package. This additional charge is made up on the basis of a charge per 100 pounds, which is composed of an arbitrary of 25 cents per 100 pounds on account of service, such as use of stations, express messengers, risk and administration expenses, plus a haulage charge which varies with distance. For example, for a package weighing 100 pounds, the total rate is the arbitrary of 20 cents for the package, plus the arbitrary of 25 cents per 100 pounds, plus a haulage charge per 100 pounds for the distance the package is carried. . . . In zone 4

*24 *Interstate Commerce Commission Reports*, pp. 431-432.

the arbitrary per 100 pounds is understood to be 55 cents instead of 25 cents.⁷

In determining the allowance for haulage, the commission took account of the differences in those conditions in different parts of the country that affect the cost of transportation, and distinguished five sections, which it designates as "zones," as follows:

These subdivisions conform generally to those recognized by the rail carriers and which this commission has, in the consideration of freight rates, been led to believe were based upon actual differences in operating and traffic conditions. . . . Zone I, as it is called, is the territory north of the Ohio and the Potomac and east of the Mississippi, in which there generally obtains a lower grade of freight rates and passenger rates and express rates than elsewhere throughout the United States, and in which the population is most dense and traffic most abundant. Below this zone lies Zone II. To the west of the Mississippi lies Zone III, which generally takes slightly higher rates than the southern territory. This zone includes the upper peninsula of Michigan, as well as a portion of Wisconsin, because the conditions in these territories more nearly meet those immediately west of the Mississippi River than the conditions obtaining in the territory immediately adjacent in Zone I. To the west of Zone III, which extends as far as Denver, lies the great intermountain country, which as yet is but sparsely populated and as to which rates distinctly higher than the rates obtaining in any of the eastern territories should be made. The belt of states running along the Pacific Coast has been set apart as Zone V, conditions therein being different from those found in any of the other zones, their population being more dense and their conditions of transportation, all things considered, less expensive than in the zone immediately to the east.⁸

In general, the allowance for haulage is based on distance as measured in units of 50 miles along the shortest rail route, but with a slightly decreasing rate for the longer distances. Thus, according to the response of the five leading companies above cited,⁹ for a haul of 50 miles, the allowance in zone 1 is 15 cents per 100 pounds. For a haul of 100 miles, the rate for each "block" of 50 miles is reduced $\frac{1}{4}$ cent; for a haul of 150 miles, the reduction is $\frac{1}{2}$ cent; and so on until the reduction amounts to 5 cents. Stated another way, for each additional 50 miles added to the length of the haul, the rate per 100 pounds for each 50 miles is reduced $\frac{1}{4}$ cent until the distance amounts to 1,000 miles. For

⁷ Response of Adams Express Co., American Express Co., Southern Express Co., United States Express Co., and Wells Fargo & Co. to the commission's order of June 8, 1912, made on October 9, 1912, p. 13.

⁸ 24 *Interstate Commerce Commission Reports*, pp. 430-431.

⁹ Appendix B, p. 23.

hauls of over 1,000 miles, the allowance per 100 pounds for each 50 miles remains unchanged until distances of 1,750 miles or over are reached. Then a reduction of 1 per cent is made for each 2 blocks, *i.e.*, every 100 miles or fraction thereof over 1,750 miles, until distances of 2,950 miles or over are reached, when the reduction amounts to 12 per cent. No further reduction is made for distances beyond 2,950 miles, or 59 blocks of 50 miles each.

While this plan for reducing the proportionate amount allowed for haulage as the distance increases is the same for all zones, the basic allowance for one block, or 50 miles, is different for different zones. In zone I it is 15 cents, decreasing to 10 cents; for zone II it is 20 cents, decreasing to 15 cents; for zones III and V it is 24 cents, decreasing to 19 cents; for zone IV it is 28 cents, decreasing to 23 cents. When the shipment is to be carried over part or all of two or more zones, the rate is the sum of elements computed for each zone. Each of these elements is the mileage proportion of what the rate would be for the entire distance within that zone.

This somewhat complex composition of the charges may be recapitulated thus:

For collection, delivery, and other expenses at the terminals, 20 cents per package.

For use of stations, express messengers, risk and administration expenses, 25 cents per 100 pounds.

For haulage, a charge per 100 pounds that diminishes slightly as the distance increases and differs in different sections of the country.

The Argument on the Commission's Methods of Constructing Rates

The express companies criticized the commission's schedule in two main respects: (1) the commission's plan of constructing the rates, and (2) the effect of the commission's schedule, as constructed, upon their earnings. On the method of constructing charges the analysis is minute and critical. Only the most significant points raised by the companies will be considered here.

The companies dispute the adequacy, in turn, of each of the allowances made by the commission for the several elements in the charge. The principal item of expense, aside from the cost of railway transportation, is what the companies designate terminal expenses. They object that the commission's allowance for this is

based on an underestimate, and they base their objection in part on their understanding that the commission depended upon data collected by the Adams Express Company for the years 1904-1907 for a limited number of offices. The companies state that these data omit important items, and that there is no evidence to show that this earlier experience of the Adams company is typical. The companies base their objection, further, on the ground that the commission's estimate from past experience, whatever its basic data, makes no allowance for the increase in costs that the companies assert must be expected in view of the steady increase of operating expenses in recent years.

The shippers answer this objection with deductions drawn from data in the record of the hearings. It is computed that the total operating expense, aside from payment to the railways, but "including the full proportion of taxes and interest at 7 per cent per annum on the company's property," was, for the Adams company, on August 18, 1909, 19.68 cents per piece; and for the United States company, on December 22, 1909, it was 12.72 cents per piece.¹⁰ Since the data for the Adams company were compiled for a time of year when the proportion of heavier shipments is greatest, and the data for the United States company at a time when the proportion of light-weight shipments is greatest, these averages per piece might be assumed to represent closely the limits between which lies the yearly average cost per piece, aside from expense to the railways.

From returns for 11 companies in 1909, representing 98.9 per cent of the total revenue from express freight received by all 14 companies operating that year, it appears that the average operating expense per piece for all 11 companies, for the three months of April, August, and December, 1909, was 20.52 cents. To this should be added taxes amounting to one third of a cent, making a total average expense to the companies for operation (aside from the payments to the railways) and taxes of 20.85 cents per piece.¹¹

Another computation made by the shippers on the basis of data reported by the American Express Company to the commission indicates that the part of operating expenses designated as terminal expense averaged, for the year ended June 30, 1911, between 13 and 15 cents per piece.¹²

¹⁰ *Brief for Express Rates Conference*, p. 45.

¹¹ *First Annual Report on the Statistics of Express Companies, for the Fiscal Year 1909*, p. 19.

¹² *Brief for Express Rates Conference*, p. 46.

Further citation is made by the shippers from the statistics of the cost of delivery for department stores in 17 cities in different parts of the United States. The average cost per package for these deliveries ranged from 4 to 7.47 cents, the latter being in Manhattan borough, New York city. On this basis, the cost of both collection and delivery would not be double these figures because collections are made along with deliveries. Yet, in any case these data do not indicate the necessary terminal expenses of express companies, because the collection and delivery of shipments is only part of the work that must be performed on express shipments at the terminals.

This controversy is confused by a failure to separate two distinct points in dispute. One question is whether the charge covers the actual expense incurred by express companies; the other is whether it covers what critics of operating expenses may consider the expense of the companies ought to be. As to the first question, there has been no pointed inquiry concerning the average actual expense per piece or per shipment for a number of companies for a considerable period. Such an inquiry would be embarrassed by the difficulty of apportioning many joint expenses so as to determine the actual expense for collection and delivery, for other terminal service, and the like. The most comprehensive information is that above quoted for 11 companies for three months in 1909. But this is the expense as reported by the companies and probably includes elements of cost not properly chargeable to transportation of express matter. However, such data as are available point to the adequacy of the commission's allowance. The commission allowed 20 cents per package for terminal expense and 25 cents per 100 pounds for other costs excepting haulage. The average weight of express pieces is about 33 pounds. That would make an allowance of 20 cents plus about 8 cents, or 28 cents per package for all operating costs aside from railway expense for transportation. This 8 cents applies in part to expenses of the railways in providing terminal accommodations for the express companies; but, even allowing for that, the charge would be ample to cover the average cost per piece according to the data already quoted. Of course, the 8 cents per package of average weight becomes practically nothing for each of the numerous packages of small weight. But the average expense for these, as indicated by the comparative expense of the Adams and the United States companies above cited, is less than for the package of average weight.

The companies also criticize the schedule with respect to the distribution, among shipments of different weights and classes of traffic, of the burden of providing for the aggregate cost of the service and for a profit. The commission had objected to the graduate charges of the companies as without any determinable logical relation to each other and as so arbitrarily made as to put upon the smaller packages an undue proportion of the burden of the cost of transportation. The commission's graduated scales were prepared to meet both of these objections. But the companies criticize the new scales on the ground that, while reducing the burden on the small packages, they make no other provision for bearing it, and thus would cause a loss of revenue of \$15,000,000 on present business on this account alone. This the companies regard as a "conclusive demonstration that the burden of the cost of transportation is not, generally speaking, misplaced at present, because unless it is so placed, it cannot be placed anywhere."¹³

The force of this criticism by the companies depends largely on how the reduction of charges will affect the volume of traffic in these small packages, and, thereby, the cost of handling them. If there should be an appreciable increase in this traffic without a corresponding increase in operating expenses, the loss of revenue would not be experienced and the reduction of the proportionate burden on the smaller packages would be free from the companies' criticism.

Further criticism of the commission's method of constructing rates concerns matters of public policy. The rates, it is complained, "upset long-established traffic conditions" that have developed under rates adjusted to the necessities of traffic. This criticism, of course, depends upon the prior question whether rates for an express transportation service should materially depart from uniformity in order to suit special local and industrial situations. Again, the companies criticize the commission's rates per 100 pounds because they

afford repeated instances of a disregard of the principle of the statutory prohibition [of the discredited long and short haul practice] and also of a disregard of the principles upon which the commission, upon application of the carriers, has made exceptions,

and because, indeed, the factors employed in the formula

¹³ *Brief for Five Leading Companies*, p. 57.

compel violations of the long and short haul principle. For example, in Zone I, under the sub-block formula, the rate from a place in the extreme southeast of one main block to a place in the extreme northwest of the next main block to the west must be 90 cents, whereas to the nearest places in the next main block still further west the rate can be only 75 cents. The same situation arises in all other zones with respect to places similarly situated.¹⁴

Another criticism by the companies is that, in some cases, the commission's rates, and in frequent cases, the haulage proportion of the rates, is lower than the first-class freight rate. From the examples cited by the companies, it would appear that this situation is probably due to exceptionally high freight rates made to meet exceptional conditions of traffic or cost of transportation. In such cases, the commission's rates may be defended on the ground that public policy is opposed to an adjustment of express rates to local and market conditions to the same degree as freight rates. But there remains the practical consideration that such situations as the companies cite will tend to transfer all first-class freight from the freight service to the express service. This raises another question of public policy as to whether all first-class freight between these points should be carried by express service. However, the volume of traffic concerned in these cases is probably very small.

Another criticism much emphasized by the companies is directed at the practicability of the commission's minute gradation of charges according to weight and distance.¹⁵ The effect of this feature of the commission's schedule is to increase the number of different charges in the graduate scales from 1,281, as found in the companies' scales, to 28,940. That is, on the

¹⁴ *Brief for Five Leading Companies*, p. 49.

¹⁵ The companies' rates per 100 pounds, on which their graduate table is based, increase by 10 cents or 15 cents up to \$2, then by 25 cents up to \$5, and by 50 cents when over \$5. In all there are only 54 different base rates per 100 pounds. But the commission's schedule grades the 100-pound rates, from the lowest to the highest, by increases of five cents. This creates 294 different rates in place of only 54. Further, under each of the companies' base rates there are only from 10 to 20 different charges for packages ranging from 1 pound to 100 pounds. But the commission's graduate scales aim to adjust the charge to each increase of 1 pound between those limits. Except in a few instances, where the charge is the same for different weights in order to avoid fractions of a cent, the commission's charges increase with each increase in weight of 1 pound. Hence, instead of having not more than 20 different charges, under any one base-rate, the commission's scales have, in most cases, as many as 100 different charges.

average, for each charge in the companies' graduate scales the commission substitutes about 23. The significance of these changes is that they increase the number of different charges that must be carried in memory, so as to be at instant command, by the clerks who assess the charges on the way-bills.¹⁶ Therefore, either these clerks will make more errors in billing or else they will have to take time much more frequently to consult the printed schedule of charges. This, of course, will reduce the speed of the clerks in getting express matter dispatched with promptness. The loss of speed might be avoided, in part at least, by employing a large number of clerks. But that would involve an appreciable increase in terminal expenses per package. Indeed, the companies contend, such increase in expense would result even if no more clerks were employed. For the number of pieces each clerk can handle under the commission's schedule of charges would be reduced.

Argument on the Effect of the Commission's Schedule: Revenues

While many of the points raised by the companies against the commission's method of determining charges are important, the crux of the issue is the collective effect of the charges on the companies' earnings. As to this, the companies claimed that their revenue would be disastrously reduced. The commission directed the companies to apply the proposed rates to some one or more day's business and report the effect the proposed rates would have upon the revenues from that business. The companies all selected October 23, 1912, for this test. The five leading companies found that the revenue would have been reduced 18.25 per cent.¹⁷ This would amount to \$26,027,341 on the basis of the gross revenues for the year ended June 30, 1912. Or, applying the same

¹⁶ The bulk of express traffic originates at the large cities, where the major part of it is delivered to the companies late in the afternoon for dispatch on evening trains. The sorting of the flood of packages according to their destination, and the making out of a way-bill with the charge for each shipment, has to be done under great pressure for time. Special clerks are assigned to the billing of shipments. And each of these clerks is assigned to shipments for some particular restricted territory in order that he may not need to be familiar with more than a limited number of different charges, which soon become fixed in his memory. Under the commission's schedule, the greater number of different charges will make it more difficult for bill clerks to carry the charges in mind with certainty.

¹⁷ *Brief for Five Leading Companies*, p. 81

percentage to the gross revenues of all nine respondent companies for that year, the loss of revenue would be \$27,686,415. While the commission's schedule is generally lower than the companies' charges, in many cases it is higher. But, in making their estimate of the probable revenue under the commission's schedule, the companies assumed that they would not be able to raise their existing charges. Further, the companies assumed that they would have to reduce all intrastate rates that were inconsistent with the commission's interstate rates in the same region.

In response to the companies' claim that the commission's schedule would cause a reduction of revenue to the extent noted, the shippers deny the conclusiveness of the reported test on the basis of the business done on October 23, 1912. In the first place, the shippers contend that test is unreliable. And in this they were supported by the Interstate Commerce Commission. It was found that all of the companies responding reported a revenue for October 23, that was appreciably in excess of the average daily revenue for the fiscal year ended June 30, 1912. For all nine respondents, this excess amounted to 12.27 per cent. For the five leading companies it was 12.64 per cent.

This excess revenue per package might result from an increase in rates, or an increase in average weight per package, or an increase in average haul per package, or an increase in the proportion of high-class traffic taking higher charges. There had been no increase in rates or charges for the day in question. The average weight per piece on October 23 showed no appreciable change from the average weight for the three months in 1909. The comparative average weights and the per cent of change are shown in the table on page 842 in connection with the per cent of the excess in the average revenue per piece on October 23 over the average for the three months of 1909.

Counsel for the shippers concluded from these facts that the increased average revenue per piece on October 23 must have been due to an increase in the average haul per piece on the day selected for the test. The commission notes, however, that this excess in average revenue per piece may be due to an abnormally large proportion of merchandise traffic, which takes higher charges than other classes of traffic. In this connection, it makes comparison with data for another day's traffic carried by the Adams company and the United States company. The returns by the United States company for October 23, 1912, show that the revenue from mer-

Comparison of the difference in average weight per piece with the difference in average revenue per piece, for October 23, 1912, and for 3 months of 1909, for each of 9 respondent companies.¹

Name of company	Per cent by which the average weight per piece on Oct. 23 differed from the average weight for 3 months of 1909		Per cent by which the average revenue per piece on Oct. 23 exceeded the average revenue per piece for 3 months of 1909
	Greater	Less	
Adams Express Co.		3.1	12.8
American Express Co.	16.2 ^a		15.2 ^a
National Express Co.	1.3 ^a		40.9 ^a
Globe Express Co.		2.5	72.1
Great Northern Express Co..		1.0	55.3
Northern Express Co.....		1.0	21.6
Southern Express Co.....		6.2	1.1
United States Express Co..	3.8		18.1
Wells Fargo & Co.....		1.5	10.3
Western Express Co.....		9.0	33.1

¹ Based on data in the decision of the commission, 28 *Interstate Commerce Commission Reports*, pp. 146-147.

^a The American Express Company and the National Express Company reported separately for the 3 months of 1909, but as one concern for October 23, 1912. The percentages shown here were found by comparing the combined report for October 23, 1912, with the report of each for the 3 months of 1909.

chandise rates was 75.81 per cent of its total revenue for that day. But on December 22, 1909, in the midst of the heavy Christmas business, when the greatest possible revenue from merchandise rates is obtained, the revenue from that source was only 69.98 per cent of the total revenue for that day. The figures for the Adams company do not afford equal support to this criticism. The commission notes, that the Adams company reported for October 23, 1912, revenue from merchandise rates amounting to 78.73 per cent of the whole, while on August 18, 1909, its revenue from merchandise rates was only 68.2 per cent of its whole revenue for the day.¹⁸ But August is probably the time of year when the proportion of merchandise shipments is lowest. Hence, there would normally be a larger proportion of merchandise traffic in October than in August. The difference noted is only something over 10 per cent and may well represent no more than the usual increase in merchandise business.

Whether the abnormal revenue per piece on October 23 was due

¹⁸ 28 *Interstate Commerce Commission Reports*, p. 146.

to unusually long hauls on that day, or to the unusually large proportion of merchandise traffic, either abnormality in the traffic for that day would produce an exaggeration of the actual reduction in revenue that would follow the application of the commission's schedule; for the commission's reductions are heaviest on the charges for the longer distances and for merchandise traffic. The commission summarizes the situation in these words:

So for this day in October (a month which produced over one tenth of the amount of the gross revenue for the preceding fiscal year) the commission is presented a showing which indicates 12 per cent more revenue than the daily average for that year, and from 6 to 10 per cent greater return from merchandise rates than upon normal days. It is also shown, as the basis for estimated reductions in revenue, average revenues per piece which exceed the averages of the three months by from 1 per cent to 72 per cent, and is asked to conclude therefrom that the proposed rates are too low.¹⁹

Analyzing further the returns for October 23, 1912, the commission points out that, according to the returns made by the companies for that day, the average revenue per piece that would have been produced under the commission's schedule, was in the case of six of the nine respondent companies, slightly greater than the average revenue per piece for the three months in 1909, and, for the remaining three companies, it was slightly less. So that, when all individual or local variations are smoothed out, the average revenue per piece under the commission's schedule would be about the same as that received by the companies in 1909.

From its examination of the returns made by the companies for October 23, 1912, the commission arrived at these alternative conclusions:

It may be said that the business for October 23 was abnormal, and that is the conclusion forced by analysis of the figures presented by the respondents. If this be the accepted conclusion, then the elaborate estimates of loss based upon those figures lose all persuasiveness. If this conclusion is not accepted, however, and the business of this day is regarded as normal, then it appears that the earnings per package at the proposed rates would not have been greatly below the actual average returns per package for the three months in any case, and that as to six of the nine respondents the returns per package for the day at the proposed rates would have been in excess of the actual average returns for the three months at the companies' rates.²⁰

This second conclusion is hardly final, as to the reasonableness

¹⁹ 28 *Interstate Commerce Commission Reports*, pp. 146-147.

²⁰ *Ibid.*, pp. 147-148.

of the commission's schedule, because the companies allege that their expenses have steadily increased in recent years. It is conceivable that an average revenue per piece equal to that of 1909 would be inadequate at the present time because of increased expenses per piece. However, the commission gives consideration later to the companies' claim that their expenses forbid a reduction of revenue.

Besides the matter of the abnormal character of the business on October 23, 1912, the shippers reject the test of that day on the further ground that the reduction of charges would stimulate an increased business without a corresponding increase in expenses, and that any conclusion from actual business done in the past does not take this into account. The only conclusive test, contend the shippers, is a trial on the basis of the actual charges proposed. To support their position in this matter, counsel for the shippers cite the well-known fact that a reduction of the price or charge for any commodity usually increases the demand for it. In the case of express, it is pointed out that the source of the increase in traffic is not limited to the potential traffic that is not now shipped.

The express companies have, in addition, the package business now carried by freight to draw from through reduced rates. The railroads have said that this package freight is unprofitable to them. Express business is principally for small packages; freight, for bulk traffic. One result of the new rates may be to readjust this business to some extent, both in the interest of the express companies, and of the railroad companies.²¹

Further support for their contention that there would result a compensating volume of new business without proportionate increase of expense is urged by the shippers in the experience of the express companies under the reduction of rates in the state of Nebraska. The new rates went into effect May 1, 1908. The revenues from intrastate business for the five companies²² operating in Nebraska showed in the year ended June 30, 1909, an increase of 9.5 per cent; for the following year, 26.5 per cent; and for the year ended June 30, 1911, an increase of 33.9 per cent. Expenses on account of both intrastate and interstate business of these companies decreased in the year ended June 30,

²¹ *Brief for Express Rates Conference*, p. 19.

²² Pacific Express Co., American Express Co., Adams Express Co., United States Express Co., and Wells Fargo & Co.

1909, 15.8 per cent; in the following year, 7.0 per cent; and in the year ended June 30, 1911, they increased .6 per cent.²³

With respect to the experience in Nebraska, the companies claim that the stimulated increase was "practically all with respect to general specials, which have been drawn from the railroad freight business or attracted to intrastate markets because of the very low rates;" that the increase in merchandise traffic was no more than the normal increase from year to year; and that, therefore, this particular experience cannot apply to the schedule of the Interstate Commerce Commission because that schedule does not contemplate any appreciable reduction in general specials, but makes drastic reductions in merchandise traffic.²⁴

Further, the companies claim that it would be impossible for the loss of revenue that would result under the commission's schedule to be compensated by new business. In the first place, the competition of the parcel post will prevent the companies from gaining any new business and will even take away part of the business they now have. In support of this contention the companies gave the results of a comparison of their revenues for January and February in 1912 and for the same months in 1913 on the traffic from their more important offices. These results are summarized in the following table:

Per cent of increase, or decrease, in express revenues for January and February, 1912, under competition of the parcels post.¹

Name of company	Approximate per cent of total business represented by offices reporting	Per cent of increase, or decrease, in revenues in 1913 from revenue in 1912, for			
		January, 1913		February, 1913	
		From traffic 11 pounds or less	From all traffic	From traffic 11 pounds or less	From all traffic
Adams	30.	— 17.8	+ .1	— 29.8	— 6.4
American	85.	— 19.0	+ 3.9	— 27.4	— 3.7
Southern	33.	— 13.4	+ 9.1	— 23.6	+ .1
United States..	45.	— 14.2	+ 3.6	— 19.9	— 4.5
Wells Fargo...	65.	— 15.2	+ 2.6	— 24.8	— 5.8
All companies..		— 16.6	+ 3.1	— 25.4	— 4.5

¹ *Brief for Five Leading Companies*, pp. 4 and 7.

But, even supposing the influence of the parcel post to be absent, the companies claim that any increase of business that

²³ From data in *Brief for Express Rates Conference*, p. 50.

²⁴ *Brief for Five Leading Companies*, p. 28.

might result could not compensate the loss of revenue on account of the reduction of the charges. It would require, according to the companies' estimate, an increase of over 22 per cent, which is more than the greatest possible increase of business that can be contemplated.

It has been already indicated that the companies' estimate of the loss of revenue is too great. The increase of business necessary to compensate the loss on account of lower charges would thus be less than 22 per cent. But, even so, it is a fair question whether the increase would be sufficient to recover that revenue in the face of competition by the parcel post. It must be remembered that the increase in business must be sufficient not only to recover the loss of revenue, but also to compensate any additional expense caused by the additional business. Before this question can be answered, allowance must be made for the effect of the changed factors in the situation upon the operating expenses of the companies.

Before entering upon that subject, it is in point to record that the commission called the attention of the companies to the volume of traffic carried by them free of cost for the railways and for each other, and in the form of returning empties for shippers. On this matter the commission said:

While it may be that the franks issued by them are within the law, nevertheless the expense of this portion of express business is not legitimately to be charged to the paying patrons. It must be treated as a gift from the stockholders of the respondents to the favored holders of the franks. The amount of this business was not fully reported for October 23. What was reported, however, when computed on the basis of the average charge that accrued on the revenue packages, indicates the possibility of a substantial addition to the yearly revenues without injustice to any one.

The losses in revenue from this free service, calculated according to the method used by the respondents in estimating the reductions of revenue under the commission's rates, are shown to be over two millions of dollars, if account be taken of only the incomplete showing of free service made in the returns for October 23.²⁵

On the matter of returning empties free, the companies claim that wherever this is done, it is a concession required in order to move the traffic in which the containers are used. It applies mainly to shipments of bread and laundry. As to the free service for railroads, the companies claim that that is part of the consider-

²⁵ 28 *Interstate Commerce Commission Reports*, pp. 150-151.

ation in their contracts, and that if this service were charged for, their percentage contracts would have to be on a higher level.

Effect of Commission's Schedule: Operating Expenses

On the question of operating expenses, the companies claim that if, on the one hand, the revenues fall off under the commission's charges, there will not be a corresponding reduction of expenses, because there will be no reduction of traffic except as the parcel post takes it away; and so far as the parcel post does this, the expenses will not decrease in proportion to the reduction of revenue, because the established organization for handling the traffic cannot be cut down in proportion to the reduction in traffic. On the other hand, if the traffic is increased under the stimulus of the lower charges, the increase will entail a more than proportionate increase of expense. This would follow, the companies believe, because

the operating expenses have increased in recent years to a greater extent than the business has increased, and there is no basis whatever for the assumption that an increased business would not involve a corresponding increase in expense.²⁸

The issue between the companies and the shippers over the probable revenue under the commission's schedule appears to center on the question of operating expenses. It is certain that the commission's lower charges will stimulate business not now carried. It is equally certain that the competition of the parcel post will offset this new business in part at the outset, and possibly altogether as reductions in rates and extensions of the service may be made in the future. But, in either case, the net earnings—which are the significant factor—will depend on whether an increase of business will necessarily entail a more than proportionate increase of expense, or a decrease of business will unavoidably be accompanied with a less than proportionate decrease of expense.

This is a speculative question that can be strongly argued on both sides. The argument that expenses would not be reduced in proportion to any eventual reduction of business, because the established organization and plant must be maintained in all its essential features, implies that operating expenses are comparatively inelastic. If that be so, then it militates against the claim of the companies that an increase of traffic would entail a proportionate increase of expenses. And yet the companies contend that

²⁸ *Brief for Five Leading Companies*, p. 29.

this would result because of the unavoidably congested conditions of the terminals in the great cities, through which such a large proportion of express matter must be handled, and because, under the greater number of different charges that bill clerks must use under the commission's schedule, the cost of billing shipments would be increased.

This raises the question as to whether the expenses of express companies might not be reduced through greater efficiency or through a reorganization of the service. The Interstate Commerce Commission has not made any suggestions of this sort, but it has questioned the accuracy of the companies' reports of expenses assignable to transportation. The commission examined expense accounts of the Adams company for August, 1909, and of the United States company for December, 1909. It found sufficient entries not properly chargeable to transportation expense to reduce the recorded expense of the Adams company 8.5 per cent and of the United States company nearly 8 per cent.²⁷ This would more than offset the Adams company's estimate of its operating deficit under the commission's schedule, and would nearly offset that of the United States company. The claim of the companies that expenses, including payments to the railways, are steadily increasing faster than revenues, in spite of the elimination of erroneous entries, the commission considers to be without significance, on the ground that, under the percentage contracts with railroads, this result can be produced whenever the contracting parties so desire.

Turning to the argument urged in support of the belief that express companies' expenses are needlessly high, the possibility of economizing in operating expenses is suggested, for one thing, by the comparison of the operating ratios of different express companies. Differences are found from company to company so great as to intimate that something besides differences in character of traffic, length of haul, or other local influences are at the bottom of them. Moreover the possibility of increased efficiency is suggested by the fact that labor comprises probably three fourths of the operating expense of express companies, aside from payments to the railways. This may be said notwithstanding the fact that express employees are scattered and hence do not admit of that degree of organization attainable with large numbers of men concentrated in one establishment.

²⁷ 28 *Interstate Commerce Commission Reports*, pp. 148-149.

The most promising argument that operating expenses could be reduced is directed at cutting down the amount of work now performed upon each package or shipment. At the present time, for every shipment the forwarding agent has to make out a way-bill. On this he enters the name of the consignor, and the date of shipment, the name of the consignee and the destination, the weight and description of the shipment, and the serial number of the package for the day of shipment. This way-bill accompanies the shipment and is checked against it by every responsible employee through whose hands it passes on its way to destination. Meanwhile the forwarding agent has to send to the office of the company's auditor a report giving full information on every way-bill issued by him. At the other end of the line, the receiving agent, after checking the way-bill against the shipment, forwards it with his report of way-bills received to the auditor's office. In the auditor's office, the way-bill is then checked against the report from the agent at the point where the way-bill originated. In the case of shipments carried by more than one company, much of this work is duplicated by each company that handles the shipment. And, besides, the total charge is pro-rated, or apportioned, to the several companies. This has been the method employed by the express companies without essential change for a generation. Obviously, the total amount of clerical labor performed upon each shipment entails a very considerable expense.

This expense is made still greater by labor incidental to the method of paying railway companies for transporting express traffic. The practice is now pretty universal of allowing the railways an agreed percentage of the charge received from each shipment. Hence, to ascertain the railway compensation, each express company must further apportion the charge recorded on each way-bill between itself and the railways over which it operates. If more than one railway has participated in the service, the railway share of the charge must be pro-rated to each of the railway companies. Plainly, a considerable part of the charge on each shipment is required to pay the cost of all this bookkeeping labor.

Express men justify this laborious method of handling shipments on the ground that it is necessary to have a sure record for locating loss, or damage, or dishonesty on the part of employees, in order to guarantee shippers security for their property. On the face of it, this point would seem to be well taken. But there is, notwithstanding, a surprising number of complaints of shipments

that do not reach the consignees, or that are unaccountably damaged in transit, and some amount of such losses must inevitably result from the haste and tension under which the traffic must be handled. These conditions make way for the human element in spite of all precautions, and open opportunities for mistakes and for clever employees to profit by dishonesty. So the question has arisen whether this laborious machinery is not too refined for the degree of security attainable under the conditions that are inseparable from the nature of the express service; whether the cost of the additional security attained by it is not far in excess of the losses that it saves. And it is urged that some less costly method of handling traffic might be devised without incurring more risk to shipments than is inevitable in the nature of things. In this connection, reference is usually made to the fact that the express service in European countries has no such complicated accounting system, and that the post office manages to keep the loss of mail matter down to a minimum by a system of inspection and surveillance, which the express companies have to adopt in part anyway. It is also said that, while the parcel post experienced numerous instances of loss and damage at the outset, many very large shippers now say their losses are no greater than those they experienced with the express service. If it be deemed essential to retain some means of identifying each shipment in the accounts, it has been suggested that some system based upon the principle of the baggage check would satisfy this requirement at much less expense than the present way-bill system. An enormous amount of duplicated labor in apportioning the charges on through shipments could be obviated by a form of central accounting office analogous to the clearing house of English railways.²⁸ But, it is certain that, for many shipments, the doubly sure safeguard of an individual record for each shipment would not be sought by shippers, providing the charges could be reduced by the amount of the saving that would result from omitting it. And there are many other shipments for which shippers would prefer insurance under private insurance agencies, if the express companies eliminated their costly safeguards and reduced their charges accordingly. Even if the percentage of losses increased somewhat, shippers of a great part of the express traffic would probably find their increased loss more than compensated by the saving in their annual express bill. Ship-

* Unsigned article, "What is the Matter with the Express Companies," in *Business America*, October, 1912.

ments of greater value or importance could be given the safeguard of individual registration and record of transit in consideration of an additional charge, as is now done with express packages of higher value, and with registered mail.

Most express men view all suggestions that involve a departure from the way-bill system as utterly unthinkable. But it is a fair question whether the really unthinkable thing is not rather the proposition that a feature of business organization, which has remained unimproved throughout the whole development of the express business, must be accepted as fixed and unimprovable for ever and ever, in spite of the fact that other agencies here and abroad have developed a similar service without that cumbrous feature. It is not unreasonable to hold the suspicion that express men are controlled by an inertia of habit, formed and continued in because of the absence of such competition as develops the utmost simplicity of service and economy of operation. To be sure, all companies feel some competition and they are all under pressure to secure the largest possible profits. But the express business is not one that has had to develop under the stern discipline of the ordinary competitive struggle for the survival of the fittest.

There is an impediment to the fullest possible realization of the remedy suggested in the nature of the payment to the railways for the transportation of express matter. Originally, the express companies paid the railways, just as any ordinary shipper, on the basis of the tonnage carried. But, it is claimed, with the increase in the volume of business, the computation of the payment on the basis of weight and distance became cumbersome and a cause of endless controversy between the companies and the railways over the amount of tonnage actually carried and over the relative rates that should apply. Gradually this basis of payment gave way to a percentage of the charge collected by the express companies. The percentage basis being thus established and being dependent upon certain data on the way-bill, if the way-bill be dispensed with in the interest of economy, it will still be necessary to record for each shipment the amount of the charge, the points of shipment and destination, and the route traversed. If this be continued, the possible economy in dispensing with the way-bill will be greatly reduced.

This is not an insuperable difficulty, because a system of identification of shipments on the principle of the baggage check, for example, would, through the record of the charge on each check,

supply all the data necessary for the computation of the percentage payment. Yet, although not a vital difficulty, it strengthens the opposition to any departure from the way-bill as the basis of express accounting.

This difficulty, in turn, is met with proposals for a more economical basis of railway compensation. It is believed by many that some other basis can be devised that would be just as equitable and automatic in its application without requiring the enormous amount of accounting labor in the computation. In this connection, there is urged the space basis, which takes account of the amount of car space occupied and the distance through which it is occupied. This is open to the objection that it neglects the considerable differences in amount of weight that has to be hauled in equal amounts of car space. The element of weight, on the other hand, is recognized in proposals that adopt the principle of railway mail pay, which takes account of weight and distance. It does this, not for each shipment, but by periodic measurements of the average weight carried over fixed distances. This basis meets the objection that it takes no account of the enormous amount of dead weight in the car itself that must be hauled in order to carry the express matter in the car. Compensation would vary with the amount of weight carried, but by no means with the total amount of weight hauled. Other proposals seek to combine these two bases in a system of compensation that would recognize both the car space that must be hauled, regardless of the weight carried in it, and the amount of weight carried in that space.

Payments to the Railways

Another point of attack in the present cost of express service is the payment to the railways. The shippers complain that the railways receive excessive compensation per ton-mile from light-weight shipments and from all shipments that go short distances. This criticism gets a footing in the practice of the express companies, under the percentage form of contract, in fixing their charges to the public so that, after the railway receives its percentage of each charge, the part remaining to the express company will be sufficient compensation for its service. By thus segregating different parts of the whole traffic—all subject to the same uniform percentage rates of railway compensation, but subject to express charges that are equivalent to different rates per pound or per mile—and by comparing the respective revenues from the different parts, it can be made to appear that the railways' share of the

charge on short-distance shipments and on light-weight shipments is unreasonably high. Of course, *per contra*, the express companies' share of the charges on long-distance shipments and on heavy shipments appears unreasonably high. But it is clear that these criticisms rest on the false assumption that the uniform percentage rate is adopted as representing a reasonable division of the charge on each individual shipment separately considered, instead of being an average division of all the charges that would otherwise be divided on the basis of a different percentage for different classes, weights, and distances. In such case, the railways would insist upon higher percentages for the heavier weights and the longer distances, while the express companies would insist upon lower percentages for lower classes, lighter weights, and shorter distances. But for the sake of greater simplicity in accounting, there is applied to all shipments a uniform percentage that will secure to the railways an aggregate revenue that will compensate them for their aggregate service and will reach the same result that would be secured under a more complicated schedule of different percentages for different shipments. If the express companies should abandon their practice of fixing charges as above described, and should make each part of the charge proportionate only to the actual service rendered by the railway and the express company in each case, though still fixing all of the charges on a level that would yield the same gross revenue for a given volume of tonnage as now, the charges to the public would be considerably readjusted; but the aggregate railway revenue from express and the average railway express revenue per ton-mile would be exactly the same as now. This criticism of the shippers is thus, in effect, not a criticism of railway express revenues, but of the express companies' method of constructing their charges with reference to the percentage contracts with the railways.

But the shippers criticize the railway revenues in the aggregate, also, and with respect to the average per ton-mile on the whole traffic. They find from data in the records of the hearings that the average revenue per ton-mile received by the railways from the Adams company on August 18, 1909, was 7.8 cents; and from the United States company on December 22, 1909, 7.3 cents.²⁹ These results accord with other estimates of average railway express revenue per ton-mile. The shippers then compare them with the average freight revenue per ton-mile namely, 7.5

²⁹ *Brief for Express Rates Conference*, p. 31.

mills, and make the statement that "for hauling express matter the railroads are paid ten times as much per ton-mile as they receive from freight." This sort of comparison, however, can be of little service in testing the reasonableness of railway express revenue because of the very great difference between the character of the traffic and service to which 7.5 mills applies and the character of the traffic and service to which the 7.5 cents applies.

A more consistent comparison is made by the shippers when they set over against the railway express revenue actually received in certain cases the revenues that the railways would have received in those cases on the basis of twice the first-class freight rate. These computations show that the railway express revenue was 3.3 times the first-class freight rate in the case of the Adams company on August 18, 1909; 3.26 times the first-class freight rate in the case of the United States company on December 22, 1909; and 2.76 times the first-class freight rate for the Adams company on October 23, 1912.³⁰ The shippers then proceed to argue that, if the railway revenue were but twice the first-class freight rate, then the commission's schedule of charges would leave the express companies ample net revenue to constitute a reasonable profit.

This is an argument that a reasonable compensation to the railways for carrying express matter would be that which, on the average, should equal twice what the revenue would have been from the first-class freight service. In support of this position, the shippers cite a rate on the Chicago, Milwaukee, and Puget Sound Railway on which certain articles are carried on passenger trains from Tacoma and Seattle to points in New England, the North Atlantic States and Ohio, and to other points in the West and South. This rate is \$4 per 100 pounds, while the regular rate by freight service on the same articles varies from \$1.25 to \$3 per 100 pounds.³¹ This, however, is not sufficient to prove the point. The rate is made, apparently, to meet certain traffic conditions in the import trade from the Orient.³² Such a rate is by no means an indication of what the railroads could afford to carry express matter for between any and all points in the United States.

³⁰ *Brief for Express Rates Conference*, pp. 33 and 35.

³¹ *Ibid.*, pp. 38-40.

³² The articles enumerated in the brief for the shippers are dry goods (n.o.s.), grass, reed or rattan furniture, alcoholic or spirituous liquors, straw or palm-leaf hats, linen goods in packages of valuation of \$900 or more for 40 cubic feet, vegetable oils in packages, raw or spun silk, earthenware, toys, fireworks, paper articles.

Another statement urged by the shippers in support of their claim that twice the freight rate would be adequate pay for the railways, is that:

In New England, influenced by the Massachusetts law, which requires a railroad to give equal express facilities to all, the railroad express rate for passenger train service is as low and lower than the present express rates, considerably lower than the commission's rates, and only a very little higher than double the first-class freight rates.⁸²

But, here again, the facts cited pertain to special traffic situations. This rate appears to be an involuntary one on the part of the railroads, since it is "influenced by the Massachusetts law." Even if a voluntary rate, it applies to a densely populated section. It does not appear to be extensively used except for purposes of distribution from a large center like Boston, and it does not cut into the service of the express companies to an appreciable degree, because it does not include the collection and delivery of the shipments. Obviously, the railroads can afford to render such a service under all these conditions and yet be quite unable to afford the same service generally and for a large volume of traffic. It should be noted also that the railway express revenue in New England is lower than elsewhere in the United States, because the percentage paid to the railways is lower and the express rates themselves are lower. This situation has been created to meet the special traffic conditions prevailing within the New England states.

On the whole, whatever might be said for this claim of the shippers, namely, that twice the first-class freight rate would be ample compensation to the railways for hauling express traffic, the support offered in their argument is altogether too special in character and too limited in scope to establish their claim.

The express companies filed an additional response to the order of the commission requesting an application of the commission's rates to some one or more day's business, that was designed to show that the existing express rates were no more than, if they were as much as, fair compensation for the joint service performed by the railways and express companies. In connection with this showing, the companies presented a table intended to indicate the rate of return on the joint property of the railroads and express companies used in the express service. These rates varied from 1.95 per cent to 5.32 per cent for the five leading companies, and averaged for those companies 3.41 per cent. Since the rate of

⁸² *Brief for Express Rates Conference*, p. 40.

return on the value of the express companies' property is well in excess of those rates, it may be argued that the rate of return secured by the railroads on the portion of their property used for the express service must be even less than these rates. But the argument is invalidated by the fact that the apportionment of railway property to the express service was made on the basis of the railway revenues from the express service as compared with other revenues. Of course, this basis of apportionment would have the incidental effect of tending to justify whatever revenues were actually received. Further, there is no acceptable valuation of the railways' property for apportionment to the express service. No defense of railway express revenues can be drawn from this showing.

Another defense of railway express revenue may be made along the line of an argument offered in the hearings before the commission. It was held, in the first place, that the investigation conducted by the Post Office Department in 1909 into the cost of carrying the mails made the incidental disclosure that the aggregate railway express revenues of nearly all the railroads of the United States for one month were 9.66 per cent of the total revenues from the passenger service;³⁴ while the car space, computed in car foot-miles, occupied by the express traffic was 10.67 per cent of the total car space in the passenger service for the month in question.³⁵ The fact that the railway express revenue was a smaller percentage of the total revenues from the passenger service than the percentage of total car space used for the express service, is held to indicate that the railway express revenue is not an undue proportion of the revenues from the passenger service, considering the relative proportion of that service used by express companies. The argument then points out that the revenues from the passenger service as a whole are far from being excessive. From the results of the same investigation, it appears that the operating expenses and taxes chargeable to the passenger service, assigned

³⁴ The month of November, 1909, was selected for this investigation, but, in the case of some railways, the data secured were for the following December or January. The railways represented in this investigation covered 77 per cent of the railway mileage and 88.9 per cent of the total length of all postal routes.

The data on the revenues for the one month were reported only by the railways' Committee on Railway Mail Pay.

³⁵ This is the figure reported by the Committee on Railway Mail Pay; the Post Office Department reported 10.66 per cent.

by the Post Office Department substantially on the basis employed by the Wisconsin Railroad Commission in *Buell v. Chicago, Milwaukee & St. Paul Railway*, consumed not less than 76.4 per cent of the passenger revenue.³⁶ Considering that the operating expenses and taxes for the whole railroad service for all the railways of the United States consume something less than three fourths of the gross revenues of the railways, this ratio for the passenger service indicates that the revenues from that service are less remunerative than all other railway revenues, and therefore are not excessive. The conclusion is then drawn that, if passenger revenues are not excessive, and if the railway express revenue is not an excessive proportion of the whole passenger revenues, the railway express revenue cannot be excessive.

This argument involves the assumption that railway revenues from all other sources than the passenger service are not excessive. Since that is disputed by some, it will be of interest to consider a finding of the Wisconsin Railroad Commission. In the case of *Buell v. Chicago, Milwaukee & St. Paul Railway*, that commission found the passenger fare could not be less than 2½ cents a mile if the companies were to secure a fair return on their property used in the passenger service in Wisconsin. At that rate of fare, the ratio, for the different companies, between the passenger operating expenses plus taxes and the gross passenger revenues is shown in the following table in connection with the rates of return (interest plus dividend) that the Wisconsin commission found would be realized on the property used in the passenger service under the above rate:

Comparison of the ratio of operating expenses and taxes in the passenger service to passenger revenues, with the rate of return on the investment for the passenger service.

Railway	Ratio of operating expenses and taxes to revenue	Rate of return on investment
	<i>Per cent</i>	<i>Per cent</i>
Chicago, Milwaukee & St. Paul	61.3	8.4
Chicago, St. Paul, Minn. & Omaha	71.0	5.5
Chicago & Northwestern	69.4	6.7

³⁶ Since the operating expenses and the revenues in question were not both reported by the same authority, there is an element of incomparability between them. But the percentage given was obtained from that construction of the data that gives the minimum percentage.

All these ratios are materially less than 76.4 per cent, and yet they allow a residual of revenues that yielded no more than 8.4 per cent return on the investment in any case. Of course, such indirect calculations as these do not prove that the railway express revenue is not unreasonable. But they establish a strong presumption to that effect.

From this perhaps too extended review of the evidence and arguments bearing on the question of express rates, it is impossible to draw any conclusion that is certain and indisputable. Much of the evidence consists of estimates into which enter, along with precise facts, assumption and expression of judgment. Much of the reasoning concerns probabilities of the future. Yet some sort of composition may be made of the forces of the different arguments in order to reach a judgment on the probable results.

Ignoring the parcel post for the moment, the probable situation under the commission's schedule may be thus summarized:

(1) The evidence establishes the presumption that the rates and charges fixed by the Interstate Commerce Commission would not cut down the revenue from any given volume of business by as much as the companies claim.

(2) The further presumption is established that the commission's rates and charges would stimulate a considerable increase of traffic.

(3) It is probable that this increase of traffic could be handled without a permanent proportionate increase of operating expense.

(4) It is probable that operating expenses, as reported by the companies, contain elements of expense not properly chargeable to the transportation of express matter.

(5) Considering these presumptions and probabilities, the conclusion is that there would be an adequate net revenue under the commission's schedule. This is not demonstrated; it is stated merely as the presumption indicated by the net significance of all the evidence.

Taking the parcel post into account, and considering the recent reduction in parcel post charges and the extension of the weight limit and the prospect of further reductions and extensions from time to time in the future, the situation may be described thus:

(1) The presumption seems to be established that the express companies can hardly recover their revenues under the commission's schedule in competition with the parcel post as that is now conducted; and that they cannot do so in competition with the

parcel post, if that service is progressively extended on the basis of rates such as those recently established. In the face of such competition the express companies would probably get that part of the traffic which demands collection service or the special care and surveillance in transit afforded by the express companies. But this probably would not be a large part of the whole traffic.

(2) It seems probable that any net reduction in the total volume of traffic, by reason of the competition of the parcel post, cannot be accompanied by a proportionate reduction of operating expenses if the express service is conducted as at present.

(3) Considering that the operating expense accounts probably contain elements of expense not properly chargeable to the express traffic, it seems barely probable that the companies can operate profitably under the commission's schedule in competition with the parcel post as that service is now conducted; but the companies probably cannot operate profitably under the commission's schedule in competition with the parcel post, if that service is extended on the basis of rates as recently fixed. Much less could they operate under the companies' charges that have been in effect hitherto.

Since the parcel post will be a factor in the situation, the question has been asked whether the Interstate Commerce Commission has not unfairly reduced the charges of the companies. On this question, the commission apparently considers only the ability of the companies to render their service on the proposed charges as independent agencies, without regard to the effect of competition. The companies claim that the effect of a loss of traffic to the parcel post will be to raise the cost of carrying the remainder, and that, therefore, a reduction of charges would unfairly create a deficit in the remaining business. But this question is sure to be answered from the viewpoint of the public economy, which considers only getting a satisfactory service for the lowest possible rate. If one of two competitors finds that, because of a division of the business with the other competitor, he cannot do his part of the business at prices as low as his competitor, the public, instead of paying the man a higher price, will transfer to his competitor all of the business as fast as he can handle it. Applied to the express situation, this means that, if the parcel post gives the service that the public wants at lower rates than the express renders the service, the public economy requires that the express companies give way to the parcel post instead of

charging higher rates on the business it continues to carry. To do otherwise would be, in the words of the Interstate Commerce Commission,

. . . equivalent to saying that inasmuch as shippers have been given the convenience and economy of the parcel post the express carriers must, on that account, be allowed to charge rates higher than would otherwise be reasonable. That is to say, the Commission is called upon to take from the shippers of the country all the benefit that they receive from the parcel post and give it to the respondents in the form of higher rates upon the remaining express business.²⁷

And yet there is this plea for the companies. The above argument does not hold if the successful competitor secures the business on charges that do not cover every reasonable cost, including at least a moderate return to compensate his own effort. Much less does the argument hold if the successful competitor is the public's own agency and the deficit has to be made up out of general taxation. In view of the well-known incompleteness of the government's cost accounting, and in view of the serious attention that Congress is now giving to the contention of the railways that their compensation for carrying mails is inadequate, and especially so since the parcel post traffic has been added, it may be argued for the express companies that the competition of the parcel post does not rest on a sound economic basis. Therefore, if the public for other reasons of public policy sets its own agency to compete in that manner with the private agencies that heretofore engaged in its service, it should, in its regulation of those agencies, permit them to secure for such service as the public continues to ask of them, compensation that is fully adequate under all the conditions created by the government's competition.

Further, there is the fact that the parcel post does not now, and will not until some future time, afford a full alternative service to that of the express companies. If the public provides its own agency for a small part of the whole express service, and, by implication of the limits fixed upon the parcel post, looks to the express companies to perform the remaining major portion, the public ought to pay the companies whatever is fair for carrying that major portion considered by itself, and not considered as part of a whole of which the companies do not have the benefit.

If the above conclusions should prove to be correct, the express companies will have these alternatives under the commission's

²⁷ 28 *Interstate Commerce Commission Reports*, p. 151.

schedule: (1) They can reorganize their service and put it on the same plane, with respect to the individual attention given to shipments, as the parcel post, and afford a service of special quality for traffic that requires it. (2) They can restrict their service to a superior grade and trust to the superiority to attract all traffic for which such superior service may be required. In either case, they would have to seek for every possible means of reducing cost per unit of traffic.

(3) Still another plan much urged upon them is that of developing with the railways an intermediate service between freight and express, *i.e.*, some form of extra fast transportation, with collection and delivery, for less than carload freight that desires expeditious service, but cannot afford the express service. This service would be superior to that of the present fast freight lines, and would be much in demand by shippers. The railways have furnished it to some extent, excepting collection and delivery, between certain points, but cannot afford to develop such a service universally. It would be too much like using a steam hammer to crack a nut. When the traffic becomes comparable to a sizable forging, the railways can be used to advantage. The Interstate Commerce Commission noted this possibility in its first opinion in the case.⁸⁸

The chief impediment to this sort of service is the matter of economical transportation. The suggestion contemplates that the traffic would not be carried on passenger trains. In that case, there could be no suitable train supported in part by other service. Special fast trains could not be economically operated unless the traffic were dense enough to fill them. It might be possible to use such trains on trunk routes, and to utilize certain accommodation passenger trains on branch routes for retail distribution from the main points along the trunk routes. This is the plan followed in France and Germany for their regular express service; but it would threaten the character of the passenger service on the branch lines. In any case, this sort of service would have to be restricted to cities and the more important towns.

(4) Another solution which is being tested by some companies is that of developing their "order and commission" departments into a general purchasing and marketing agency for the more direct distribution of products from producers to consumers. This contemplates a service that would provide consumers with information as to sources of direct supply and would accept orders from

⁸⁸ 24 *Interstate Commerce Commission Reports*, p. 432.

them for goods to be purchased, transported, and delivered for a charge that would cover all services. Many such activities are now carried on by express companies, and it would be possible to develop this retail department without undue expense. But it would find a sturdy if not an overcoming opposition from those merchants whose business would suffer because of such a new distributing agency. And that opposition could find effective expression in the form of a boycott with respect to the ordinary traffic of the company.

In conclusion, it looks very gloomy for the future of the express companies as carriers of small parcels. But they have an unexploited field to develop, without important competition, in the matter of an expeditious freight service with pick-up and delivery, and in the matter of purchasing and selling agents in retail distribution of goods. The development of these fields would materially alter the character of the companies' business. But they would then be in a line of activity in which there could be little danger of government competition and in which they would have an advantage over private competitors doing a forwarding or commission business without the express companies' railway privileges.

ARTHUR S. FIELD.

Washington, D. C.

OBJECTIONS TO A COMPENSATED DOLLAR

There is little room for difference of opinion as to the importance of preventing fluctuations in the general level of prices. If this level is falling, numerous interests and industries suffer special injury; if prices rise, others bear the chief burden; while all classes in the community are more or less harmed by a movement in either direction.

Any proposal that offers relief deserves consideration, but because of the importance of the interests affected, only a most searching criticism of it will be adequate. The underlying theoretical assumptions should be examined to determine their soundness; the practical obstacles to the adoption of the plan should be considered; and, finally, as many as possible of the details of its operation should be analyzed. Many a device that in its general features seemed theoretically sound and politically feasible, has met disaster because certain apparently unimportant difficulties in operation have been overlooked.

Professor Fisher's plan for a compensated dollar is being subjected to these various forms of analysis. From the theoretical side it has been pointed out that its use of the multiple or tabular standard opens it to all of the objections that may be urged against such a method of correcting price fluctuations.¹ Although Professor Fisher does not admit it, the plan also seems to most critics to be based on the quantity theory of money, as to the accuracy of which there is by no means a general agreement. Even those who accept this theory as an explanation of price movements are not in accord as to the closeness of the connection between the quantity of money and prices and the promptness with which prices will respond to a change in the supply of coined gold.

From the standpoint of political expediency Professor Taussig has recently shown² that an international adoption of the plan would probably be impossible and that a single country would not be likely to attempt it alone. Still other reasons for this conclusion might perhaps be urged, but this paper will be confined to the third of the lines of criticism mentioned above—certain difficulties that would probably be encountered in the operation of the plan. Assuming that it is theoretically sound and that the legislation

¹ For one of the most recent of these criticisms see an article by Professor Kinley in *AMERICAN ECONOMIC REVIEW*, March, 1913.

² *Quarterly Journal of Economics*, May, 1913.

necessary for its adoption could be enacted, is it a workable device?

Professor Fisher has acknowledged the existence of certain obstacles, but there is danger that these very admissions will serve to turn the discussion into other channels. They deserve analysis, however, because they may be of enough significance to prevent the success of a plan otherwise satisfactory.

First, and perhaps most important, would be its serious effect on many long-term contracts. Professor Fisher has admitted that the device could not be applied to check a fall in prices—that “the ‘seigniorage’ must never, of course, be negative.”³ If the “mint-bullion” were less than the amount of bullion in the coin dollar there would be an opportunity for enormous gain by the simple process of melting the coins and exchanging the bullion thus secured for a larger amount in the coined form. These coins would in turn be melted for sale to the mint, there being made on each transaction a profit whose amount would be determined by the difference between the weight of the dollar and the mint-bullion. This process could be kept up with indefinitely great profit to the dealer in bullion and corresponding loss to the government.

In reply to this Professor Fisher urges: (1) that prices will in all probability continue to rise for a number of years;⁴ (2) that the weight of the coin dollar might be reduced from 25.8 grains to 20 grains or 15 grains, either at once or when the contingency appears;⁵ or (3) that if “the index number actually shrinks below par by a substantial amount (say 10 per cent) then all gold coin is to be withdrawn from circulation and gold certificates substituted (or new gold coins of lighter weight).”⁶

The application of the third of these suggestions may be considered first. There would be many obstacles encountered in any attempt to effect the exchange of certificates for coin. Even if the certificates thus issued were redeemable in dollars of the same weight as the ones surrendered it is hard to understand how holders of the coin could be compelled or persuaded to surrender it. Presumably they now hold the coin instead of certificates because they prefer

³ *Quarterly Journal of Economics*, February, 1913, p. 13.

⁴ *AMERICAN ECONOMIC REVIEW*, September, 1912; and *North American Review*, December, 1912.

⁵ *Memorandum on A More Stable Gold Standard*, p. 15. This suggestion does not seem to appear in Professor Fisher's later discussions of the subject.

⁶ *Quarterly Journal of Economics*, February, 1913, p. 14. Also in *The New York Times*, December 22, 1912.

it. Habit strengthened by prejudice sets the custom of each community and so determines the nature of the cash holdings of the banks, as well as the medium of exchange among the people. Or perhaps the needs of the banks in connection with foreign gold shipments make convenient the holding of a considerable amount of gold coin and bullion. A certain quantity of the metal itself is needed and the passage of such a law as the one proposed would in no way change this need.

But if the exchange of certificates for coin could be effected nothing would be gained, so long as the certificates were made redeemable in dollars of the same weight as the ones surrendered. If a reserve of 100 per cent were kept behind them there would be no change in the situation. The same amount of gold represented by certificates would be outstanding and prices would not be affected. If a reserve of less than 100 per cent were kept, these pieces of paper would no longer be certificates of deposit (except perhaps in form) but would become government notes, protected by a reserve as are the greenbacks. Probably Professor Fisher would not advocate such an issue of government promises to pay, an idea which elsewhere he seems careful to avoid by insisting that any "seigniorage," accumulated by the operation of the plan when prices are rising, is not to be disposed of but held as a trust fund. At least, it is important to understand clearly just what his proposal signifies.

The other alternative is a certificate redeemable in a dollar of a reduced weight. Such a proposal, even though unobjectionable on any other grounds, would greatly increase the difficulty of calling in the certificates. Popular sentiment against "debasement of the standard" would be aroused and the coin would be withheld. Moreover, the gold certificates now outstanding amount to over a billion dollars and they could not, without violation of the promises on them, be redeemed in anything but a 25.8 grain dollar. Unless they could be called in, we would have outstanding two kinds of certificates redeemable in different amounts of gold and hence of different value. The annoyance of this in daily business transactions would be difficult to estimate.

The second of the suggestions is that the weight of the coin dollar be reduced either at once or when the contingency arises. Even though no real ground for objection existed, a proposal to reduce the weight of our dollar under any conditions would encounter a storm of protest. Belief in the importance of a dollar

of constant weight and fineness is too deep-rooted to be ignored. There would, however, be real reason for concern. Long-term contracts as expressed in bonds and contracts of lease would be affected in various ways. Some of these are promises to pay a certain number of "dollars," not specifying gold; others promise "gold dollars"; and still others carefully specify "gold dollars of the present standard of weight and fineness" or a definite number of grains or ounces of gold of a certain fineness. In other words, many such contracts are carefully worded to guard against changes in our standard, while others are not. A reduction in the weight of the dollar would result in an immediate and disastrous readjustment in the relative values of these securities.

Assume two bonds each for one thousand dollars due on the same date. The first contains no statement that payments are to be with gold dollars, or else does not specify gold dollars of "the present standard of weight and fineness." The second carefully promises payment in "gold dollars of the present standard of weight and fineness" or perhaps in a given number of grains or ounces of gold of a certain fineness. Prices fall 10 per cent and a reduction in the weight of the coined dollar is put into effect. The first bond being redeemable in the new light-weight dollar would at once become of less value than the second. When one stops to consider the immense number and the great variety of promissory notes outstanding, the seriousness of such a change becomes apparent.

Even if the first of the bonds just mentioned were as carefully worded as the second, its value would be impaired if it were secured by collateral in the form of other promises to pay which were not stated with similar care. Even the possibility of a reduction in the weight of the dollar would introduce into the value of the bonds a speculative element that would vary with the distance of the maturity date. Thus, differences in the wording of the promise, in the date of maturity, and in the nature of the security, would all contribute to an extremely complex and often inequitable readjustment of values if the weight of the dollar were changed or even provided for as a possibility.

If the value (in gold) of all these promises to pay were changed to the same extent, little or no harm would result. But if the value of one should remain the same while that of another was changed, there would be serious injustice. The difficulty lies in the fact that the effect would not be the same on all securities.

If this problem were met by the stipulation that the provisions of the new plan were to apply only to future contracts, great confusion still would result. Large numbers of outstanding leases run for 99 years and some of them for 999 years. Bond issues run from relatively short periods to very long ones.⁷ Until these matured or were retired the values of many of them would be seriously affected, and a prospective purchaser of a security would need in each case to inform himself as to the terms of payment. New issues would be payable in the light-weight dollar, while for perhaps several hundred years some of the older issues payable in the heavier dollar would be outstanding.

None of these difficulties will exist if prices continue to rise; and that they will rise is the firm conviction of many students whose opinions carry great weight. Professor Fisher has very fully and clearly stated the reasons for his views on the point.⁸ This paper is not the place for a reply, even if the writer were capable of presenting it. Yet we may observe (1) that the predictions are based on an acceptance of the quantity theory of money and (2) that authorities are by no means in agreement as to the future of price movements.

Authorities in general, whether quantity theorists or not, are by no means in agreement as to the probable future of the production of gold as compared with the growth of trade. Thus Hon. George E. Roberts, Director of the Mint, has recently stated:

It is an interesting question whether the gold supplies of the next 10 or 20 years will be sufficient to allow of further additions to banking reserves, corresponding to those of the past and to the natural expansion of trade and industry. . . . It cannot be safely predicted on the strength of present conditions in the principal gold fields of the world, that the production of gold will materially increase in the next 10 years.⁹

Sir Felix Schuster, governor of the Union of London & Smiths Bank, Ltd., recently said:

The demands for gold may be expected to show continuous expansion, which the increased production of gold . . . may be expected to be sufficient, but not more than sufficient to meet.¹⁰

Sir Edward Holden, chairman of the London City and Midland Bank, Ltd., at about the same time expressed similar views.¹¹

⁷ The West Shore Railroad First 4's mature on January 1, 1931.

⁸ AMERICAN ECONOMIC REVIEW, September, 1912; and *North American Review*, December, 1912.

⁹ *Annual Report of the Secretary of the Treasury*, 1912, p. 308.

¹⁰ *New York Journal of Commerce*, February 2, 1913.

¹¹ *Ibid.*

There is no occasion here to settle the controversy. It is sufficient to emphasize the fact that there is a pronounced difference of opinion as to the immediate future. Prices may continue to rise for some years longer or may fall.

But even if the general movement for years to come is upward there are minor price movements to reckon with. No matter how explained there comes every few years a decline. These reactions vary widely but at times result in a fall of even more than the 10 per cent suggested by Professor Fisher. This is shown by the accompanying table which gives three different index numbers monthly for the years 1907 and 1908 with the Sauerbeck number also stated quarterly.

TABLE 1.—Index numbers.

Months	1907			1908		
	Bradstreet	Economist	Sauerbeck	Bradstreet	Economist	Sauerbeck
January	\$8.91	2499	80.0	\$8.29	2310	76.0
February	8.99	2494	80.7	8.12	2309	74.5
March	9.12	2521	80.0	7.98	2266	74.1
April . . .	8.96	2516	80.7	8.06	2263	73.8
May . . .	8.98	2549	82.4	7.96	2195	73.6
June . . .	8.99	2601	82.0	7.72	2188	72.9
July . . .	9.04	2594	81.1	7.82	2190	73.1
August . .	8.93	2571	79.4	7.93	2190	72.2
September .	8.52	2519	79.1	7.90	2168	72.5
October . .	8.85	2457	78.8	8.01	2200	72.2
November	8.74	2414	76.7	8.06	2194	72.2
December .	8.52	2360	76.2	8.21	2198	72.3

The Bradstreet number reached a high point of \$9.04 in July, 1907, falling to \$7.72 in June, 1908, a drop of over 14 per cent. The Economist number fell from 2601 in June, 1907, to 2168 in September, 1908, over 16 per cent. The Sauerbeck number fell from 82.4 in May, 1907, to 72.2 in August, 1908, over 12 per cent.¹² To avoid the necessity of reducing the weight of the dollar (if the plan is to be adapted to falling prices), it would be necessary to consider some preceding date when prices were low as a starting point or to inaugurate the plan only when we are at a level that could be generally recognized as a low one.

Suppose that the plan were adopted at once (May, 1913), but

¹² These percentages are all calculated by viewing the amount of fall as a percentage of the high point taken as a base. Any other method of calculation would likewise give a decline of 10 per cent or more in each case.

that we consider the low level of 1908 as a starting point. Examining the Bradstreet index number we find the low level of \$7.72 in June, 1908. At present the Bradstreet number is \$9.13, a rise of about 18 per cent. Immediately it would be necessary to begin demanding the deposit of over 30 grains of gold at the mint for each coined dollar. Every holder of uncoined gold would suffer a sudden and serious depreciation in the value of his product. There would be a severe shock also in many other directions as the result of requiring so much "seigniorage" at the outset. Since there would have been no opportunity for an accumulation of "seigniorage" by the mint, any unusually heavy demand for redemption of gold with bullion at the "redemption-bullion" (a price which would be only slightly less than the 30 grains just mentioned) might cause the government serious embarrassment.

If, instead, we adopt our present level of prices as a starting point we face the possibility of a fall in these prices at any time. There has already been a drop from \$9.18 in December, 1912, to \$9.13 in May, 1913 (Bradstreet index number). If Professor Fisher is correct in his conclusion that we are approaching a crisis,¹³ it must be recognized that even though the present decline does not continue a crisis will probably be accompanied by a fall similar to those of the past. A "compensated dollar" could not check such a fall without the disastrous results described above.

No matter how the device is modified it cannot safely be applied to prevent falling prices. Since prices may not continue to rise and since in any case we may reasonably expect periodical reactions in the price level, the value of the plan as a solution for immediate problems is open to question. It certainly is debatable whether a remedy that is, at best, only a half-remedy should be adopted. It is even more doubtful when so many other objections exist.

A second reason for criticising a compensated dollar is its effect upon the exchanges and hence upon our foreign trade both in commodities and in securities. This, of course, assumes that the plan would not be adopted internationally, the reasons for such a view being very clearly presented by Professor Taussig in the article referred to above. If adoption by a considerable number of leading countries could be secured this difficulty could not arise.

That the exchanges would be affected Professor Fisher admits.¹⁴

¹³ AMERICAN ECONOMIC REVIEW, June, 1913, p. 345.

¹⁴ His ready admission of the serious effect on foreign trade is surprising. In reply to the question, "Would not the adoption of the plan by the United

If prices rise and "mint-bullion" is increased, the miner would at first send his gold to England and then draw exchange against it. The resulting increase in the supply of exchange would force down the price to a level at which further exportations of gold would be unprofitable. This point having been reached we would for the time being have a new "par of exchange" at say \$4.82. If prices should then fall, the reverse movement would occur and "par of exchange" would rise to \$4.8665 or to some other level. Whether the fluctuations in exchange would be immediate or would be at all proportionate to the changes in the index number and in the corresponding changes in "mint-bullion" may be open to question. The value of the plan is dependent on the correctness of the belief that commodity prices would respond readily to the changes in "mint-bullion." Such prompt changes in prices would bring correspondingly prompt changes in foreign exchange. As we are proceeding on the assumption that the plan is theoretically sound and would produce the results expected of it by its author, let us examine the effect on our foreign trade.

That there would be fluctuations is clear, but in these fluctuations there is danger, the seriousness of which does not seem to have been fully realized. In discussing the point one must keep in mind that it is proposed to have monthly or quarterly adjustments. If exchange quotations changed promptly after each announcement there would be a sharp fall or a sharp rise that would introduce a speculative element into all transactions involving the use of foreign exchange. If the response were more gradual, there would still be numerous wide variations.

When it is remembered that a large amount of our foreign trade involves or should involve the extension of credit for periods as long as three to six months or occasionally a year, one begins to realize the seriousness of a proposal that makes wide fluctuations possible. At present, sight sterling ordinarily fluctuates between approximately \$4.84 and \$4.89, and time drafts between limits correspondingly close together. Much less than this amount of difference is sufficient to make arbitraging profitable and to justify bankers who have obligations abroad maturing in the future in buying in advance exchange for delivery to them at the time these foreign

States alone play havoc with our foreign trade?" he answers "Yes, most certainly. Foreign exchange would become uncertain and variable. While the plan could be worked if adopted by one nation without the concurrence of others, its benefits would be best secured through its adoption by a number of nations." *The New York Times*, December 22, 1912.

obligations must be met. On the other hand, the American exporter who fears a fall in the exchange will in a similar manner protect himself by "selling short" on exchange in order to prevent a loss. If the limits between which exchange may fluctuate are widened, the uncertainty is correspondingly increased and international transactions both financial and commercial become precarious.

Let us notice first the extent to which these fluctuations would take place. Professor Fisher has made careful calculations of the price movements that would have occurred had his proposal been adopted in 1896 or in December, 1903, with the prices of each of these dates as a base.¹⁵ Table 2 repeats the index numbers as he gives them, showing the price fluctuations that would have occurred had his plan been put into effect on either of the dates indicated. In parallel columns are given the various exchange levels that correspond to the fluctuations in the index numbers. Thus in column I the index number of 100 for 1896 has \$4.8665 as the corresponding par of exchange. By January, 1904, prices having risen by $1\frac{1}{2}$ per cent, there would have been a drop of $1\frac{1}{2}$ per cent in "par of exchange" to \$4.7936. The drop in prices by July, 1904, to 98.4 would have given a rise in exchange par to 1.6 per cent above \$4.8665 or \$4.9443. This first column gives the results with a 1 per cent brassage with quarterly adjustments, the prices of 1896 being taken as the base. Column II gives similar figures, the base being the same and the adjustments quarterly but with a 3 per cent brassage. Column III uses the prices of December, 1903, as a base with a $1\frac{1}{2}$ per cent brassage and monthly adjustments.

Some of the fluctuations are worth noticing. Those of column III are the least violent, but from March to May in 1904 the rise is from \$4.85 to \$4.90; and from October to December of the same year there is a fall from \$4.93 to \$4.86. From July, 1907, to January, 1908, the rise is from \$4.85 to \$5.01; and from July, 1908, to January, 1909, the fall is from \$5.02 to \$4.85. In columns I and II the fluctuations are even more pronounced.

In some instances these extreme fluctuations might be very slightly offset by the ordinary influences that affect the price of exchange but at other times these same influences might act in such a way as to increase the variations. It scarcely seems necessary to emphasize the injury to trade that would result from

¹⁵ *Quarterly Journal of Economics*, February, 1913, p. 22.

TABLE 2.—*The index number and "par of exchange."*

	I Brassage 1 per cent Adjustments quarterly		II Brassage 3 per cent Adjustments quarterly		III Brassage 1½ per cent Adjustments monthly	
	The index number	Par of exchange	The index number	Par of exchange	The index number	Par of exchange
1896	100.0	\$4.8665	100.0	\$4.8665	. . . .	. . . .
1903 December					100.0	\$4.8665
1904 January . .	101.5	4.7986	100.5	4.8422	99.8	4.8762
February . .					100.9	4.8228
March . . .					100.2	4.8568
April . . .	101.2	4.8082	100.7	4.8325	99.5	4.8908
May . . .					99.3	4.9005
June . . .					99.5	4.8908
July . . .	98.4	4.9448	98.2	4.9540	98.8	4.9248
August . .					98.8	4.9248
September .					98.8	4.9248
October . .	99.2	4.9054	99.0	4.9151	98.6	4.9346
November .					99.4	4.8956
December .					100.1	4.8617
1905 January . .	102.0	4.7692	102.0	4.7692	100.4	4.8471
April . . .	101.5	4.7936	100.5	4.8422	99.7	4.8810
July . . .	100.2	4.8568	99.7	4.8810	100.2	4.8568
October . .	102.9	4.7254	102.9	4.7254	100.8	4.8276
1906 January . .	104.6	4.6427	102.7	4.7352	100.8	4.8276
April . . .	103.8	4.6820	100.2	4.8568	99.9	4.8713
July . . .	103.7	4.6865	100.9	4.8228	100.4	4.8471
October . .	103.8	4.6816	101.1	4.8130	100.7	4.8325
1907 January . .	106.4	4.5551	103.6	4.6914	102.0	4.7692
July . . .	106.2	4.5648	100.9	4.8228	100.2	4.8568
1908 January . .	100.7	4.8325	96.0	5.0611	96.9	5.0173
July . . .	97.7	4.9784	94.7	5.1244	96.7	5.0270
1909 January . .	101.6	4.7887	98.6	4.9346	100.3	4.8520
1910 January . .	104.5	4.6476	102.9	4.7254	100.4	4.8471
1911 January . .	98.5	4.9394	98.5	4.9394	98.9	4.9200

such a state of affairs, but perhaps a few illustrations should be given. In 1891 Sir David Barbour, in bringing forward the Indian budget for the ensuing year, took occasion to discuss the effects of the fluctuating rate of exchange on India. A few extracts from his remarks at that time are as follows:¹⁶

What India requires is not a high rate of exchange rather than a low rate, but some system under which fluctuations in exchange shall be neither great nor frequent, and shall oscillate round a fixed point. . . .

¹⁶ Sir David Barbour, *The Standard of Value*, pp. 196 ff.

The theory of a beneficial stimulus to trade owing to fluctuations in exchange between countries having different standards of value is an untenable and mischievous delusion. A sudden rise in exchange such as we had this year will unquestionably check business for a time and cause a depression of longer or shorter duration. . . . Almost anything would be better than to accept violent and continual fluctuations in exchange as our inevitable lot for all time.

The United States Commission on International Exchange, appointed in 1903, begin their report as follows:¹⁷

The gradual fall to a lower level of value and the serious fluctuations in the gold price of silver bullion for the past ten years have been slowly but unceasingly undermining the commerce of the important silver-using countries which do not have gold as a basis for their monetary systems. The fact that the importing merchants of such silver-using countries cannot reckon upon the cost in their own local currencies of the remittances in gold, which they must use in making settlements for purchases made in gold-standard countries, has been slowly but surely producing domestic commercial paralysis, checking foreign investments for the development of public and private enterprises, and hampering the importation of the products of the labor of the gold-standard countries. The more enlightened nations which suffer under such stress are alive to the importance of rescuing themselves from the disaster which is surely impending, but, by reason of individual burdens and general conditions, are not strong enough in all cases to place their monetary systems upon the full gold standard with the general use of a gold currency.

This entire report and the one submitted the next year by the same commission are filled with illustrations of the dangerous effect on commerce and business of a fluctuating exchange rate.

A concrete illustration of the loss that may be suffered is found in the following which is quoted verbatim from Margraff's *International Exchange*:¹⁸

In February last, a certain banker sold a draft on Mexico City payable in Mexican dollars at the rate of 87¾ cents per Mexican dollar, advising the draft on date of issue to his correspondent in Mexico, and requesting reimbursements of its equivalent by draft upon his New York bankers. The banker was cognizant of the fact that the value of the Mexican dollar was subject to sudden and violent fluctuations, and knowing this, endeavored to protect himself from a possible loss by charging his customer a price in excess of the current rate of exchange for the Mexican dollar, and in so doing believed himself amply protected.

In due course his Mexican correspondent acknowledged receipt of advice, relating to draft issued, and informed him that the draft would be promptly protected upon presentation, and reimbursed for, in the manner desired on the date of payment of same.

¹⁷ Report of October 1, 1903, p. 11 (Sen. Doc. No. 144, 58 Cong., 2 Sess.).

¹⁸ Second edition, p. 101.

Instead of the draft being presented for payment, within the usual time, it was held by the payee, who happened to be the purchaser, until April the fifteenth. During the intervening time, February to April, 1903, the price of silver steadily advanced so that the Mexican dollar sold by the banker and represented by his draft issued in February, at the rate of $87\frac{3}{4}$ cents, was quoted and converted in April by his correspondent in Mexico City at the rate of $88\frac{7}{8}$ cents resulting in a loss to the banker issuing the draft of $1\frac{1}{8}$ cents on each dollar less the accrued interest on the money paid for the draft during its circulation.

As international trade develops the necessity for more certainty will increase. The margin of profits is narrow and speculative features should be carefully excluded. Moreover, one of the most serious weaknesses in our foreign trade relations at the present time is the unwillingness of the American exporter to grant long credits to the foreign importer.¹⁹ Growth in trade is dependent on an encouragement of this policy but longer credits mean a longer period during which prices for exchange may widely vary.

The above quotations and illustrations all have reference to the fluctuations in exchange on silver-using countries, but the significant fact is that the immediate cause of the difficulties cited was in every case a fluctuating exchange rate. Variations in the gold price of silver may have been the underlying reason but the fluctuations were the source of harm. Any influence that would cause uncertainties in the rate of exchange between the United States and other countries would have similar bad effects. A compensated dollar by its very nature and by the admission of its sponsor would create just this sort of situation.

The movement for a gold-exchange standard in silver-using countries has been due to the facts just cited. Its adoption in many of them seems to have solved the problem and to have encouraged trade and investments. In some respects the compensated dollar may be similar to the gold-exchange standard, as Professor Fisher asserts, but as thus far outlined it lacks the one feature which is most important—the power to maintain stability in our exchanges. The only method by which such stability could be secured is by definitely announcing our adoption of the gold-exchange standard. Our government would then stand ready, as do those of other gold-exchange countries, to buy and sell exchange at all times, at such a price as to keep the rates stable, the drafts being sold against accounts in the center or centers against which they were drawn.

University of Pennsylvania.

E. M. PATTERSON.

¹⁹ A thorough study of this is to be found in *Foreign Credits*, published by the Bureau of Foreign and Domestic Commerce, Special Agents Series, No. 62.

AMORTIZATION

Both borrowers and lenders are giving keener attention to the amortization (extinction rather than conversion) of long-time loans. Railroads and industrials in this country will, it is said, soon require from four to five billions of dollars. The sums needed for federal, state, and municipal loans will also be enormous. Accepting the extinction of such loans as necessary, the study of the best way to secure such extinction is essential.

Progressive legislation thereon in Massachusetts is at last conclusive against the sinking fund method of repaying public loans. But now from England comes a profound treatise,¹ by Edward Hartley Turner, supporting the opposite view, not only for public loans, but for commercial or financial undertakings where the conditions are much more variable. A deeper interest in this far-reaching subject is thus aroused on both continents.

Mr. Turner is lecturer on municipal accounts at the Manchester (England) Municipal School of Commerce. In 1906 he was appointed the British accounting expert to the Commission on Public Ownership and Operation formed in New York by the National Civic Federation.

Mr. Turner claims that his elaborate work is entirely practical. It affects financial operations of the largest magnitude. It upholds amortization through sinking funds. It fulfills, however, a dual use; one curative, the other premonitory. The more profound its explication of sinking fund problems and the greater their stated number, the plainer is the warning to avoid them. The rocks and shoals of financial navigation are to be shunned rather than sought. The principles explained adapt the book both to public finance and to privately owned commercial and financial undertakings; to America as well as to Great Britain; and to any currency of a decimal nature. To American readers a special preface is addressed. An index contains nearly 2,000 references to the text, which is handsomely printed. The entire work is an achievement in substance and appearance; it is replete with the solution of problems incident to sinking funds. It admits that the sinking fund method is the most complex mode of repayment, and yet insists that it is "*by far the best*" (p. 135). It ignores the apothegm that prevention is better than cure; and that prevention should always have the

¹ *The Repayment of Local and Other Loans. Sinking Funds.* By Edward Hartley Turner. (New York: The Ronald Press Co. 1913. Pp. xxvii, 538. \$6.)

first claim. As a treatise on sinking fund therapeutics it is probably unsurpassed; but its attempt to uphold the sinking fund method as supreme for the repayment of loans challenges the experience of both Europe and America. Its very merits tend to frustrate its author's cardinal aim.

The book is not a treatise on the laws of municipal loans. Statutory obligations thereon are very variable both in Great Britain and overseas. The general practice of Parliament and of government departments controlling such matters is not based, the author says, upon any well-defined principles. But the Local Government Board of England seeks to impose a uniform system, especially as to times for repaying loans for public works having longer or shorter periods of duration or continuing utility.

The life of the asset and the consequent period of repayment presents one of the most difficult of funding problems, both in municipal finance and in private undertakings, considering the extended and complicated nature of municipal and industrial activity, ever widening. "This variation in the life of the asset," the author says, "imports special difficulties into the problem, relating to the vexed question of the adequacy or otherwise of the sinking fund instalment as a provision for depreciation, obsolescence and supersession" (p. 346).

Mr. Turner insists that the modern parliamentary practice is right, namely, to require the redemption of public utility loans to be spread over a period well within the life of the asset created out of the loans, and to differentiate between various classes of outlay in fixing the period to be allowed for each (ch. 31). The same practice may be equally sound for private undertakings, even if the conditions thereof are much more variable and elastic, whereby the original arrangements between borrower and lender may be altered.

As the repayment, other than by the simple instalment method (p. 111), of loans spread over a period of years involves questions of compound interest (p. 2), the author first investigates the mathematical principles governing the annual or periodic accumulation of a present sum of money, and also of a sum of money payable or receivable at the end of each of equal and definitely recurring periods of time. All such problems follow the algebraical rule relating to geometrical progression; and the author's primary object becomes a conversion of that algebraical formula into a formula applicable to the main subject-matter of the book, namely,

compound interest. He adopts his own symbols, and in chapter 10 gives a detailed explanation thereof and of his formulae which deal with his standard calculation forms. Throughout the book the higher branches of mathematics are employed in the calculations, for which it is claimed that the ordinary methods of arithmetic are inadequate and that the aid of logarithms must be invoked even if the fullest use be made of the various published tables of compound interest. The final chapters deal with such pertinent subjects as the life of the asset, the equation of the period of repayment, and the incidence of taxation.

The following scheme arranges in groups some of the complex sinking fund problems which are mathematically treated by the author:

The Annual Instalment

- (1) A deficiency in the fund. Two variations.
- (2) A surplus in the fund. Four variations. Remarks as to sinking funds of commercial and financial undertakings.
- (3) The rate per cent. Three variations. Summaries of the methods of adjustment.

The Annual Increment

- (4) Problems relating to the rate per cent of accumulation.
- (5) Problems relating to the redemption period.
- (6) Problems combining the two preceding.
- (7) Problems where the future variation in the rate of income is known and is definite.
- (8) Problems where the future variation in the rate of income is anticipated, but is uncertain.

The Date of Borrowing, and its Relation to the Redemption Period

- (9) Loan for several years in one sum in each year, each loan payable in a prescribed period from the dates of borrowing:
 1. By one sinking fund only.
 2. By separate sinking funds for each year's loan.
- (10) Loan for several years in one sum in each year, payable in one sum on a certain date:
 1. Where date of payment is known when the money is borrowed.
 2. Where date of payment is fixed after the sinking fund has operated for several years, and an adjustment of the fund is required.
- (11) Loan for one or more years, in varying amounts and at various dates each year, and it is required that the revenue or rate account of each year be charged with a proportionate part of the annual sinking fund instalment.

An appendix to the book contains 68 standard calculation forms prepared by the author, to find the exact or approximate rate per cent, or number of years, in connection with each of 5 standard tables of compound interest as applied to a sum of money and to an annual or other periodic payment. Altogether this work, the result of years of experience, is a remarkable demonstration of some of the uncertainties, hazards, and difficulties that beset the archaic sinking fund method of repaying debts.²

According to Mr. Turner (p. 110), the English Public Health Act, of 1875, sec. 234, still furnishes the standard for methods of repaying public debts in Great Britain, and will apply equally to commercial and financial undertakings, as based upon general financial practice. Three alternative methods, at the option of the local authority, are specified, by which the loan debt may be repaid:

- | | |
|---|------------------|
| (1) The <i>Instalment Method</i> ; by equal annual instalments of principal. | } "Serial Bonds" |
| (2) The <i>Annuity Method</i> ; by equal annual instalments of principal and interest combined. | |
| (3) The <i>Sinking Fund Method</i> ; setting apart annually as a sinking fund to accumulate by compound interest such a sum as will, with accumulations by compound interest, pay off the principal of the loan within the prescribed period. | |

Of the first of these three methods Mr. Turner says: "The instalment [serial bond] method is exceedingly simple in operation, seeing that it is merely an arithmetical calculation, and does not involve any question of compound interest whatever" (p. 111).

There is a well recognized canon that the simpler and the easier finance is, "the nearer it is to perfection," yet Mr. Turner instead of recommending the instalment method which he affirms "is exceedingly simple in operation," finally concludes that:

Summing up the respective merits of the various methods of repayment of the debt of local authorities, it may fairly be concluded that the accumulating sinking fund method is *by far the best*. It [theoretically] bears equally upon the taxation or revenue of each year of the repayment period; and as regards the investor, it is at once more convenient and more equitable than either of the other two methods (p. 135).

The conclusions of Mr. Turner, however, should not be taken without careful analysis.

² Compare *The Use and Misuse of the Sinking Fund*, by P. D. Leake (London: Gee & Co. 1912); also in *The Accountant* (London), Nov. 23, 1912, pp. 663-669.

M. Trinquat, in his *De l'Amortissement des Emprunts d'Etats*, published in Paris in 1899, wherein is a bibliography on sinking funds, including ninety-six works in different languages, accepts the principle that finance should be so simple as to be easily understood by all classes, and that the easier it is the nearer it is to perfection (p. 381). He agrees with the eminent political economist J. B. Say in that there are no two ways of extinguishing debt; the *only way* is, for a state as for an individual, to use the revenue above the expenses. Every other form of extinguishing a debt is a pure folly, wherefrom no advantage accrues to the state (p. 385). His opening chapters aim to show that morally, politically, and economically amortization of public debts is a necessity. He maintains that for the public to free itself from the obligation of paying debts is to encourage itself to incur infinitely new debts (p. 78); and he quotes Ricardo, that sinking funds rather tend to encourage expenditure, than to diminish debt (p. 209). And Sargant wrote: A sinking fund "acts on the public as a narcotic," for "the confidence placed in the efficacy of these schemes has contributed further to ease the alarm which the magnitude of the public debt would otherwise have produced."³ A still more modern authority affirms that:

Whenever the financial condition of a nation warrants a repayment of debt there are simpler methods of proceeding than sinking fund arrangements. . . while it [a sinking fund] has been discarded in the practice of the more advanced nations, it is sometimes used by nations of weaker credit.⁴

And in Canada, Mr. Macpherson, of the Institute of Chartered Accountants of Ontario, has pronounced "the day of the sinking fund as past," insisting that, "with a thorough sense of the responsibility attaching to the position which I take, I have no hesitation in saying that the sinking fund is a curse to the average municipality. . . . By far the greater part of the debentures issued at the present time are upon the instalment or annuity plan."⁵

Mr. J. Hampden Dougherty, a member of the Charter Commission for a new charter for New York city, wrote to the "New York Tribune" of April 12, 1909, that:

The theory of sinking funds as security for the payment of public debts has become obsolete. . . . The Commission of 1908 favors the

³ *Sinking Funds*, p. 170.

⁴ *New International Encyclopedia*, vol. VII, p. 617.

⁵ Macpherson, *Municipal Accounting*, pp. 26, 28.

abolition of all sinking funds, which, however, may not be done without breach of contractual pledges, unless the city debt be *entirely refunded*. Great as the problem of refunding would be, it would be wise to attempt it and eliminate all sinking funds for the future. . . . The sinking funds are a clog upon the city's development. . . . From every point of view the perpetuation of the sinking fund system is unnecessary and costly.

While Mr. Turner's chapters on sinking fund problems are so elaborate, his general summary of all three methods of repaying debts (p. 140) is hardly adequate, for the tabular statement there given and printed hereinafter on page 886 is based upon a loan of only £1,000 repayable in the short term of 10 years. Mr. Turner fails to emphasize the enormous difference in the cost, and far greater difference in the interest account to the borrower or taxpayer, between these methods when applied to larger amounts for longer terms. The inadequacy of such limited illustrations of this phase of funding has often misled. As such transactions apply to hundreds of millions of dollars of loans, often running for 20, 30, 40, 50 and more years, a tabular statement of the great difference between the practical result to the taxpayers of the instalment or serial bond method and the sinking fund method in larger operations, is in justice obligatory and will be presented later in condensed form.

Furthermore, the sinking fund, which is supposed to earn enough to meet the principal of the debt, but which earns *no part of the interest*, that being often far greater than the principal, is subject to constant risks. It is notorious that sinking funds are often neglected, mismanaged, lost, made the scapegoat by being appropriated to other uses, and have been stolen. Even state constitutions and state laws to maintain the inviolability of sinking funds, are found to be inadequate to protect either creditor or debtor. However sound in theory a sinking fund may be, it is the *mode of investment, its administration*, which is the vital point. Expense, too, lurks in the prolonged interest account which taxation must meet annually, and which must also meet any deficiency in the sinking fund.

The suspension of a sinking fund is at times deliberate, and is essential in sound finance if money must be borrowed to maintain it; for to borrow to keep up the sinking fund is a purely fictitious operation, which really adds to the debt it in no wise reduces. England suspended the sinking fund in 1886-87, after the war in Egypt, and again more recently on account of the Transvaal war,

reliance being placed upon the nation's credit for the final liquidation of these debts.⁶

In England the successive failures of sinking funds, it is said, "made the term Sinking Fund almost one of reproach."⁷ Again:

In 1816 a Sinking Fund was commenced in France, on the principle of Mr. Pitt's English one. It has long since ceased to produce any effect but that of creating confusion in the accounts.⁸

In time of peace, it [the sinking fund] has no efficacy beyond that which would result from applying the surplus revenue to an equal amount in the redemption of the debt; and in time of war, when more debt is contracted than is paid off, it ceases to have any efficacy whatever, and only serves to increase the burdens of the people when they are least able to bear them, not only by the expense attending one per cent of taxes raised, but by the expense attending the execution of the plan.⁹

As late as 1869, from England came astonishing revelations, proved by a parliamentary committee, to the effect that:

Estimated as a net result of the sinking fund system kept up during war, the nation had, between 1785 and 1829, borrowed £330,000,000 at about 5 per cent interest, in order to pay a debt of the same magnitude at 4 ½ per cent interest. This policy, by which a debt of 4 ½ per cent was converted into one of 5 per cent, meant an annual loss of interest of £1,627,765 extending over forty-three years.¹⁰

Equal to a total loss of £69,993,895 or \$338,770,427!

During our Civil War the United States did not make that mistake, for although the Act of 1862, authorizing legal-tender notes, provided for a sinking fund of 1 per cent, yet:

* Trinquat, *De l'Amortissement des Emprunts d'Etats* (Paris, 1899), p. 388; Raffalovich, "Review of the World's Financial Affairs," *Journal des Economistes*, January, 1903; *Journal of Commerce and Commercial Bulletin* (New York), February 3, 1903; E. A. Ross, "Sinking Funds," *Publications of the American Economic Association*, vol. VII (1892), pp. 92, 103.

⁷ Sargent, *Sinking Funds* (London, 1868), p. 82.

⁸ *Ibid.*, p. 131.

⁹ "Errors in our Funding System," *Edinburgh Review*, January, 1823, pp. 1, 11, 12. "It is probable that in many cases the use of a sinking fund is an altogether unwarrantable draft drawn upon the future, because there is no reasonable certainty that the fund, whether it be state, municipal, or commercial, will not be raided before it attains its object." (P. D. Leake, *The Use and Misuse of the Sinking Fund*.)

¹⁰ Ross, "Sinking Funds," *Publications of the American Economic Association*, vol. VII (1892), pp. 17, 18; Lalor, *Cyclopedia of Political Science*, vol. III, p. 720.

During the war no attempt was made to fulfill this pledge, as the government was continually borrowing and adding to its total indebtedness.¹¹

Or, as stated by John Sherman:

While the United States was borrowing large sums and issuing bonds, it was folly to pay outstanding bonds, and this was not done until 1868, when the Treasury was receiving more money than it disbursed.¹²

The late Professor Dunbar, of Harvard University, in his *Economic Essays* (1904 ed., p. 84 *et seq.*), referring to Mr. Pitt's famous sinking fund system which was swamped by the gigantic wars of the French Revolution, affirms that it rested "upon a complete illusion as to the possibility of holding Parliament permanently to the system—as to the possibility, that is, of binding the debtor by a compact made with himself." On the other hand, Alexander Hamilton, following Pitt, hoped for an adequate surplus revenue to sustain his system, which "was made useless by the astonishing growth of national revenue" (p. 89). So after our Civil War the wonderful prosliciency of the nation swept aside the sinking fund requirements of the congressional act of 1862, reducing them to a mere perfunctory bookkeeping entry.

For many years the state of Massachusetts far outranked any other state in the Union in the magnitude of its state debt. On September 30, 1913, its funded debt was \$117,838,412. Its sinking funds were \$34,674,498. Again, the gross debt, with interest obligations (metropolitan, municipal, state, and county), resting upon the Metropolitan District of Boston and vicinity alone—39 municipalities out of 353 in the state—is about \$400,000,000, on about 400 square miles of territory, or about one twentieth the area of the state. Such a debt—of national proportions—has caused serious study of the operation of sinking funds. Massachusetts, although permitting the optional use of "serial bonds" since 1882 (*Acts of 1882*, ch. 133) finally in 1913 (*Acts of 1913*, ch. 719, sec. 13) prohibited sinking funds for municipal loans, and made the "serial bond" method compulsory for such loans: thus causing all its municipal indebtedness "to be issued upon the same salutary and equitable basis as that already adopted by the Commonwealth" (House Doc. No. 2162, 1913, p. 25). In this respect Massachusetts is supposed to lead the world.¹³ Prior

¹¹ Dewey, *Financial History of the United States*, p. 356.

¹² Sherman's *Recollections*, vol. II, p. 876.

¹³ It may be observed that West Virginia, by its constitution of 1872, art. X, sec. 4, expressly provided for payments of the debt as under the serial bond method as follows: "The payment of any liability other than that of the

to this the present new city charter of Boston (*Acts of 1909*, ch. 486, sec. 26) provided that all loans issued by that city shall be made payable in annual instalments, and that no sinking fund shall be established for any loan. The sinking fund method is now abandoned, as a financial anachronism, out of date, unreliable, too costly, and to be discarded in advanced municipal finance. Certain transit bonds of the city of Boston are specially provided for under *Acts of 1910*, chapter 437 and *Acts of 1911*, chapter 165.

Recent investigations made (under ch. 11, *Resolves of 1912*) by Hon. C. F. Gettemy, the director of the Bureau of Statistics of Massachusetts, of the sinking funds and serial loans of the municipalities of that state (House Doc. No. 2162, 1913), involved calculations of some 1,200 municipal sinking funds (not including about \$42,000,000 in the sinking funds of Boston), and revealed net apparent deficiencies in 40 cities and towns aggregating \$1,794,391.58, and net apparent surpluses in 47 cities and towns aggregating \$2,855,192.37. Hence the legislation that followed (*Acts of 1913*, ch. 719, sec. 13) prohibiting sinking funds in Massachusetts for municipal loans.

Last winter it was discovered that the citizens of the state of New York had been taxed for sinking funds nearly \$19,000,000 (\$18,773,045.57) in excess of the amount required under a scientific bond amortization plan. This extraordinary overtax appears to have progressed through four administrations, and grew out of an erroneous and mistaken policy pursued by those managing that feature of the state's business. It was estimated that the continuance of this huge accumulation of unnecessary moneys would ultimately have amounted to a sum in excess of the whole amount of authorized bond issue of \$234,000,000!¹⁴ This astonishing error would still have its overmatch in the revelations of the English parliamentary committee mentioned above, where the sinking fund mismanagement meant a total loss in 43 years of \$338,770,427!

If the principles of scientific accounting now applicable to local government in Massachusetts could be brought to bear at large, astonishingly lax and ineffective methods would be exposed, as

ordinary expenses of the State, shall be *equally distributed* over a period of at least twenty years."

¹⁴ *Tribune*, *Sun*, and *Times* (New York), February 10, 11, 1913.

they have been with many public sinking funds in that state. If, already, an overtax of nearly \$19,000,000 has been enforced for some recent New York state sinking fund bonds, where that state's bonded debt was (Apr. 23, 1912) \$108,055,660, what might not be disclosed with the very many sinking funds of New York city, totalling \$304,860,242, and whose gross funded debt, April 1, 1913, was \$1,137,211,854, or more than the interest bearing debt of the nation?

The New York News Bureau (June 23, 1905) affirmed that:

The provision of a sinking fund has usually been considered as an abundant safeguard for bond investors. Experience, however, shows there have been many exceptions. The most frequent reason for the receiverships of railway companies is the failure to pay the interest on mortgage bonds. During 25 years, up to 1898, more than 700 railroad companies, with a mileage exceeding 100,000 miles, and representing about \$3,000,000,000 in capital stock and bonded indebtedness, had been put into receiverships, notwithstanding the common practice of creating sinking funds for many of them.

About the year 1880 the Boston sinking funds were despoiled of \$82,000.¹⁵ In 1904, \$292,000 were reported as taken from Boston's sinking funds for current expenses in an exceptional way.¹⁶ In 1909 the sinking fund of the city of Lynn, Mass., was reported as about \$400,000 short.¹⁷ The city's sinking funds in Chicago have been reported as generally taken for current expenses.

It has been said that "no part of the commission administration of Des Moines, Iowa, is more brilliant than its financial record." (*Nat. Munic. Rev.*, Oct., 1912, p. 723). But an expert analysis of Des Moines' finances revealed a shortage in its interest and sinking fund appropriations of \$438,827.77, and affirmed that the new commission government had continued to impose inadequate tax levies, falling, in 1909, "far short of yielding even the current interest charge to say nothing of making the proper sinking fund provision." By that analysis it also appears that "the new government like the old has systematically evaded its moral obligation, and is playing fast and loose with the city's credit. On a tax valuation of \$19,551,000, the levy for interest and sinking fund purposes during 1910 should have been 5.9 mills instead of 2.6 mills" (*Nat. Munic. Rev.*, Apr., 1912, pp. 177, 178).

¹⁵ *Auditor's Report*, Boston, 1880-81, p. 7.

¹⁶ *Boston Transcript*, August 15, 1904, but see *Acts of 1903*, ch. 191, §2.

¹⁷ *Boston Herald*, June 7, 9, 1909.

If Massachusetts' lead is followed, forbidding sinking funds for new public loans, a normal result may well be the readjustment or refunding, from time to time, and as conditions permit, of large amounts of outstanding public sinking fund bonds.

The readjustment of both state and municipal sinking fund bonds, or of a large part of them, throughout the nation, into state or municipal serial, convertible consols ("early convertability" being the American policy), or otherwise, is in order; not forcibly, without the consent of the bondholders, as tried in Virginia, but by the voluntary coöperation of both borrower and lender, and to their mutual advantage, as will now appear.

Mr. Turner summarizes the three methods of repaying loans in table 1 on the following page.

This table is for only £1,000 and for only 10 years' time. Yet the difference in the *interest* charges between the three methods is:

	Difference Interest in interest
1. Instalment method	£275.
2. Annuity method	295.10 £20.10
3. Sinking fund method	500. 225.

The difference in the *cost* of the £1,000 loan to the borrower is:

	Difference Total cost in cost
1. Instalment method	£1275.
2. Annuity method	1295.11 £20.11
3. Sinking fund method (basis of 5 per cent)....	1295.11 20.11
5 per cent is too high; $3\frac{1}{2}$ per cent is safer, ²² which gives approximately:	
4. Sinking fund method (basis of $3\frac{1}{2}$ per cent)	1352.+ 77.+

Bearing in mind the magnitude of modern fiscal and financial operations, a deeper impression is made if in the above tables for £1,000 we read £1,000,000, and assume a proportional ratio of

²² In Massachusetts it is the practice to base the computations for sinking funds "on the assumption that the funds should earn $3\frac{1}{2}$ per cent annually, this being deemed a conservative figure as the basis of a uniform computation" (House Doc. No. 2162, 1913, p. 16). In Canada it is claimed to be "unsafe to calculate on the sinking fund earning more than Savings Bank interest." (*Macpherson's Municipal Accounting*, p. 41.) Mr. Turner himself affirms (p. 148) that for long-time bonds "it is very difficult, if not impossible" to fix an average rate per cent correctly for accumulations for long periods, and adds that "the practice generally is to assume a rate of accumulation slightly lower than the rate of interest payable to the loan holders." He then illustrates by numerous solutions on a $3\frac{1}{2}$ per cent basis.

Table 1.—*The repayment of the debt of local authorities: general summary of all methods, showing the annual charge to revenue or rate in respect of a loan of £1,000 repayable in 10 years under the instalment, annuity and sinking fund methods.*

Year	Instalment method			Annuity method			Sinking fund method			Year
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	
1	£100	£50	£150	£79.51	£50.	£129.51	£79.51	£50	£129.51	1
2	100	45	145	83.49	46.02	129.51	79.51	50	129.51	2
3	100	40	140	87.66	41.85	129.51	79.51	50	129.51	3
4	100	35	135	92.05	37.46	129.51	79.51	50	129.51	4
5	100	30	130	96.65	32.86	129.51	79.51	50	129.51	5
6	100	25	125	101.48	28.03	129.51	79.51	50	129.51	6
7	100	20	120	106.56	22.95	129.51	79.51	50	129.51	7
8	100	15	115	111.88	17.63	129.51	79.51	50	129.51	8
9	100	10	110	117.48	12.03	129.51	79.51	50	129.51	9
10	100	5	105	123.24	6.27	129.52	79.51	50	129.51	10
	£1000	£275	£1275	£1000.	£295.10	£1295.11	£795.10	£500	£1295.10	

increase in the interest and in the cost to the taxpayer or borrower, the result then being, for £1,000,000 for 10 years:

		Difference Interest in interest
1. Instalment method	£275,000	
2. Annuity method	295,100	£20,000
3. Sinking fund method.....	500,000	225,000

	Total cost	Difference in cost
1. Instalment method	£1,275,000	
2. Annuity method	1,295,100	£20,110
3. Sinking fund method (5 per cent basis).....	1,295,100	20,110
4. Sinking fund method (3½ per cent basis)...	1,352,000	77,000

The next table summarizes numerous computations verified by a public accountant and submitted to Massachusetts officials and to the general public, in connection with legislation in that state on sinking funds and serial bonds. Coupled with the prudential reasons that as a rule prohibit the general adoption of the sinking fund method, the application of the following table to large operations at once justifies the rejection of Mr. Turner's conclusion that the sinking fund method is "by far the best."

Table 2.—Serial bond and sinking fund methods contrasted.

\$1,000,000 at 3 per cent Difference in INTEREST in favor of serial bonds				\$1,000,000 at 4 per cent Difference in INTEREST in favor of serial bonds		
20 Years	40 Years	50 Years		20 Years	40 Years	50 Years
\$285,000	\$585,000	\$735,000		\$380,000	\$780,000	\$980,000
Difference in cost in favor of serial bonds				Difference in cost in favor of serial bonds		
Sinking Fund	20 Years ¹	40 Years ²	50 Years ³	20 Years ¹	40 Years ²	50 Years ³
Or. 3 per cent basis	\$19,426	\$109,199	\$173,305	\$114,426	\$304,199	\$418,305
" 3½ " "	.....	51,791	111,908	76,483	246,791	356,908
" 4 " "	.....	.....	58,057	40,231	194,765	303,057

¹ Decimal for 19 years, and 19 payments.

² Decimal for 39 years, and 39 payments.

³ Decimal for 49 years, and 49 payments.

If the number of payments were to equal the full number of years, there would be an increase over the above in the saving in favor of serial bonds, the ratio of such increase being larger with the bonds of a shorter term.

If both the decimal taken and the number of payments made each equal the full number of years, there will still be a large gain in favor of the serial bonds.

The point is sometimes raised against serial bonds that if a taxpayer can employ his money at a higher rate per cent than is charged for the loan under the sinking fund method, that is if he can earn say 6 per cent with his money and pays 4 per cent for the loan, his profit is 2 per cent on the sinking fund method pending the life of the loan, which profit the serial bond method would, it is assumed, prevent or impair.

A sufficient answer to this appears in an editorial thereon in "The Commercial and Financial Chronicle" (New York, December 23, 1895, p. 1759), which shows that if such an argument based on the value of money to the taxpayer were to be carried to its logical extreme, it would lead to wholly untenable grounds; for if the argument is admissible at all, why could it not with equal plausibility be urged against ever paying off the bonds? Why not let them run indefinitely? The taxpayer would then be relieved from all concern as to the extinguishment of the loan. In comparing the two methods, extraneous considerations of such a nature must, as the editor makes clear, be entirely excluded from the calculation. The assumption that each taxpayer, out of possible thousands, would get say 6 per cent for his proportion of the difference between the two methods is an irrelevant hypothesis. Again, one taxpayer might misuse or lose his entire share; another contrive to get 10 per cent or 20 per cent on his share. The obvious diversities of such an adventitious conjecture help to preclude its application to the main question.

In this connection it may be observed that after a certain period the serial bond requires the annual payment of *less* money than the sinking fund method, so that thereafter, on the score of possible interest profit to the taxpayer, the situation becomes reversed and the result ultimately is in favor of serial bonds. Thus table 3 demonstrates year by year, how a \$1,000,000 twenty-year 4 per cent serial bond compares in cost with a \$1,000,000 twenty-year 4 per cent sinking fund bond, the sinking fund being on a 3½ per cent basis; compound interest is allowed also at 3½ per cent on the differences in the annual contributions between the two methods; and the final saving in favor of the serial bond method is \$59,133.02.

Table 3.—Comparison between serial bond and sinking fund methods—\$1,000,000 at 4 per cent for 20 years.

Years	Serial bond method 1/20 payable each year		Sinking fund method, 3 1/2 per cent basis	Difference in favor of		Interest on difference at 3 1/2 per cent compounded
				Serial method	Sinking fund method	
1	Prin. \$50,000					
	Int. 40,000	\$90,000	\$76,657 ¹		\$13,343 19 ys.	\$12,308.91
	50,000					
2	38,000	88,000	76,657		11,343 18 "	9,726.50
	50,000					
3	36,000	86,000	76,657		9,343 17 "	7,424.69
	50,000					
4	34,000	84,000	76,657		7,343 16 "	5,389.68
	50,000					
5	32,000	82,000	76,657		5,343 15 "	3,608.39
	50,000					
6	30,000	80,000	76,657		3,343 14 "	2,068.98
	50,000					
7	28,000	78,000	76,657		1,343 13 "	757.39
						\$41,283.84 ²
	50,000					
8	26,000	76,000	76,657	\$ 657 12 ys.		\$335.77
	50,000					
9	24,000	74,000	76,657	2,657 11 "		1,222.14
	50,000					
10	22,000	72,000	76,657	4,657 10 "		1,912.16
	50,000					
11	20,000	70,000	76,657	6,657 9 "		2,415.82
	50,000					
12	18,000	68,000	76,657	8,657 8 "		2,742.62
	50,000					
13	16,000	66,000	76,657	10,657 7 "		2,901.68
	50,000					
14	14,000	64,000	76,657	12,657 6 "		2,901.74
	50,000					
15	12,000	62,000	76,657	14,657 5 "		2,750.97
	50,000					
16	10,000	60,000	76,657	16,657 4 "		2,457.24
	50,000					
17	8,000	58,000	76,657	18,657 3 "		2,028.38
	50,000					
18	6,000	56,000	76,657	20,657 2 "		1,471.39
	50,000					
19	4,000	54,000	76,657	22,657 1 "		792.95
	50,000					\$23,933.86 ²
20	2,000	52,000	40,000		12,000	
	\$1,420,000		\$1,496,483	\$139,884	\$63,401	
			1,420,000	63,401		
Saving by serial bond method.....			\$76,483	\$76,483		
Deduct interest saving in favor of sinking fund			17,349.98			
Final saving in favor of serial bond method			\$59,133.02			

¹ Sinking fund \$36,657
Interest 40,000

\$76,657

² Interest on sinking fund differences \$41,283.84

² Interest on serial bond differences 23,933.86

Interest saving in favor of sinking fund \$17,349.98

Two objections to the serial bond—unpopularity and a high rate of interest—have practically vanished. The advantages of serial bonds to both borrower and lender are now recognized far and wide, and appertain to loans of hundreds of millions of dollars, including industrial as well as public loans. The money market is now too broad, elastic, and responsive to be cramped by the narrower view of the last century.

A third objection to serial bonds has been the larger initial payments required in the earlier years of the loan. Some wish to avoid these in order to put more rather than less of a burden upon their successors. But, in the majority of progressive municipalities, successors of today have far more to bear than their predecessors who could have borne more. The generation to come will have its full share of new tax burdens. The debt incurring tendency is to be restrained by a present liability, rather than encouraged by shifting that liability to a later generation. Moreover, our "successors" are, for a large part, to be *ourselves*; for taxpayers of today between 25 and 40 years of age must still be meeting many present outstanding long-time bonds when from 55 to 70 years of age. The "successor" excuse is not altogether municipal prudence; rather a costly evasion. Again, serial bonds can be paid in equal annual payments as to both principal and interest, or by the "annuity plan." This is more expensive than by the "instalment plan," though less expensive than by the sinking fund plan. Thus: \$1,000,000 at 4 per cent for 20 years costs:

1. By the instalment plan (serial bond).....\$1,420,000
2. By the annuity plan (serial bond)..... 1,471,635
3. By the sinking fund plan (3 1/2 per cent basis).... 1,496,483

The principles herein involved are better understood now, and are more highly appreciated even though more clerical labor and more changes in investments are incident to serial bonds. Safety for both creditor and debtor is now recognized as controlling. A modern banking house²³ tersely summarizes the merits of serial bonds, for private and for public corporations, thus:

"WHEN A BOND ISSUE IS SERIAL, THE INVESTMENT
GROWS SAFER AS IT GROWS OLDER."

²³ Peabody, Houghteling & Co., Chicago, Ill.

The striking contrast between the operation of serial bonds and sinking fund bonds was emphasized in tabular statements drawn to the attention of state treasurers of Massachusetts, pending official consideration of this subject. It was thereby shown that the difference in the *interest* account between the sinking fund and the serial bond methods for the three main items, about \$56,000,-000 of forty year bonds, of the state contingent debt—park, sewerage, and water—would be about *twenty-six millions of dollars*, even if the bonds had been issued in serial form at a one half per cent *higher* rate than under the sinking fund form! Also that the difference in the actual *cost* to taxpayers, between the two methods, would be about \$8,360,000 on a $3\frac{1}{2}$ per cent basis. Naturally these extraordinary exhibits have stimulated the consideration of refunding many existing public sinking fund bonds into serial bonds even if at a higher rate per cent, provided suitable legislation therefor in the respective states be first obtained.

Tables 4 and 5 that follow give in detail a demonstration of the above statement as to the approximate principal sum of \$56,000,000.

Table 4.—*Massachusetts state contingent debt, as of December 10, 1902, excepting Armory loan of \$1,893,000.*

	3 per cent	$3\frac{1}{2}$ per cent	Total	Interest	Premiums
Sewerage ...	\$7,989,912	\$2,980,000	\$10,969,912	\$13,270,652	\$370,813
Parks	2,680,000	8,350,000	11,030,000	14,826,000	739,160
Water	10,900,000	23,600,000	34,500,000	45,532,875	2,300,487
	\$21,569,912	\$34,930,000	\$56,499,912	\$73,629,527	\$3,410,460
				3,410,460	
				\$70,219,067	
				56,499,912	
Total, principal and interest.....				\$126,718,979	

If the above 40-year sinking fund, 3 per cents had been issued as serial 40-year bonds at $3\frac{1}{2}$ per cent, and the above 40-year, sinking fund, $3\frac{1}{2}$'s had been issued as serial 40-year bonds at 4 per cent, the difference in interest between the sinking fund method and the serial bond method, even with that increase of interest rate, would be:

Principal		Interest	Principal and interest
\$21,569,912	3% 40 yr. }	(\$70,219,067)	\$126,718,979
34,930,000	3½% " " }		

(1) \$56,499,912

\$21,500,000	3's at 3½%,	Interest	
	40 yr. 1/40		
	each year	\$15,426,240	
35,000,000	3½'s at 4%,		
	40 yr. 1/40		
	each year	28,700,000	
(2) \$56,500,000		44,126,240	\$100,626,240

Difference in INTEREST in favor of
serial bonds \$26,092,827

But even if the above \$56,000,000 (using round numbers) is so successfully financed by the sinking fund method as to pay the principal of the debt at the end of 40 years, yet it is a more expensive method than the serial bond method (due to the difference in interest), whether the sinking fund is based upon a 3½ per cent on 4 per cent or even 5 per cent basis, as appears by the following table, computed by the Robinsonian sinking fund tables, and any excess of such expense involves corresponding additional hazard.

Table 5.

	3½% basis Decimal for \$1 for sinking fund being .011969 for 39 years ¹	4% basis Decimal for \$1 for sinking fund being .010635 for 39 years ¹	5% basis Decimal for \$1 for sinking fund being .008347 for 39 years ¹
\$56,000,000 sinking fund require- ments for 40-year loan	\$26,140,296	\$23,226,840	\$18,229,848
\$56,000,000 for 40-years' inter- est at 3½ per cent	78,400,000	78,400,000	78,400,000
Cost of loan by sinking fund method	\$104,540,296	\$101,626,840	\$96,629,848
\$56,000,000 40-year serial bonds, 1/40 payable yearly			
Interest (annually di- minishing) at 3½ per cent	40,180,000		
Cost of loan, serial bond method	\$96,180,000	96,180,000	96,180,000
Difference in cost in favor of serial bond method	\$8,360,296	\$5,446,840	\$449,848

¹ Thirty-nine years, instead of forty, is taken for the decimal, because one year is allowed for the practical operation of the sinking fund; following the practice at the Boston City Hall.

Such data have aroused a strong normal interest in the readjustment or refunding of many outstanding public sinking fund bonds, as the responsive field offering therefor is promising and large, such readjustment or refunding being quite possible for the mutual advantage of both borrower and lender through appropriate legislation that recognizes a voluntary coöperation on their part.

Two kinds of sinking funds are noticed by our courts: a real sinking fund, and a pseudo sinking fund. The first is intended ultimately to extinguish a certain indebtedness; the second is designed to allure purchasers of bonds by holding out a security that is such in appearance only and not in reality. If the first, which is based upon integrity, but is so often exposed to maladministration and to the many contingent problems that Mr. Turner evolves, and may, in the case of public loans, be subject for decades to political vicissitudes and control, has become, for public loans, a subject for legislative suppression, *a fortiori* ought the second, or deceptive kind, to come under vigorous treatment or fall into disuse. "The mere retention in hand of sums out of revenue for any purpose does not constitute a sinking fund; there must be a specific investment of money intended to accumulate at interest."²⁴

"The best way to sink a debt is to pay it; the surest sinking fund is *payment*."²⁵

ALFRED D. CHANDLER.

Brookline, Massachusetts.

²⁴ P. D. Leake, *The Use and Misuse of the Sinking Fund*.

²⁵ George Morgan Browne, *The Sinking Fund* (2d ed., 1880), p. 10. Mr. Browne was at one time president of the Eastern Railroad. See also "New York City Finances," by W. H. Prendergast, comptroller, in *National Municipal Review*, April, 1913, pp. 221, 229.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

The Economics of Everyday Life. A First Book of Economic Study. Part I. By T. H. PENSON. (London: Cambridge University Press; New York: G. P. Putnam's Sons. 1913. Pp. xiii, 176. \$1.00.)

Elements of Economics. With Special Reference to American Conditions. By HENRY REED BURCH and SCOTT NEARING. (New York: The Macmillan Company. 1912. Pp. xvii, 363. \$1.00.)

Political Economy. By S. J. CHAPMAN. Home University Library, No. 49. (New York: Henry Holt and Company. 1912. Pp. 255. \$.50.)

The enrichment of the college curriculum in the last quarter of a century has been paralleled by a similar change in the range of studies in secondary schools. Since the high schools are for many the final educational institution, it is in them that the beginning, if not all, of the instruction in important fields of knowledge will be received by an influential number of future citizens. The question arises, then, why the prevalent interest in economics and social subjects and their supreme importance in modern society have not resulted in a development of economic and social studies in the secondary schools similar to that which has occurred in the colleges and universities. While this is not the place to consider the complicated reasons involved, there is little doubt that the lack of good textbooks has been one contributing cause for the comparative infrequency of economics in secondary school curricula. The books under review are of interest mainly in considering their adaptability to instruction in such grades. In them one looks not for new truth but for suggestive treatment of the old. Further, they are based upon traditional views as to methods of instruction in economics; and there is no trace of influence from the experiments in more inductive study now being made by certain university and normal school teachers in the Middle West. Assuming, then, the undoubtedly debatable conclusions that economics should be taught in secondary schools and that the instruction should be by the use of conventional textbooks, the questions that arise concern their general reliability, their selection of topics, their emphasis, their point of view, their concreteness and vitality, and the likelihood that they will tend to cultivate

reasoning power, for certainly economic study does not consist of information only.

Mr. Penson's *The Economics of Everyday Life* deals with production, exchange, distribution; and is to be followed by a second part discussing consumption, taxation, trade unions and co-operative societies. While the treatment follows accepted theory and particularly Professor Marshall's views, it is fresh. Examples and illustrations are new; diagrams are simple and seem helpful. Quite properly, in view of its purpose, the largest part of the book is given to production. While the treatment of value and distribution is brief, it is not superficial. The author's classification of France and the United States as now bimetallist countries is the result of his definition of bimetallism, but is contrary to usage and misleading. All in all, this is an excellent attempt to present accepted economic theory to younger pupils.

The book by Professors Burch and Nearing is very different in approach and character. Economics is presented not as a science, so much as an art of welfare. They "discuss the ideals necessary to attain this goal of welfare; the means of promoting welfare through the consumption, production, exchange, and distribution of wealth; and the various efforts of men, individually and collectively, to realize the economic ideal and to attain the goal for which all are striving." Part I treats of economic ideals; part II of consumption of wealth, including standards of living; part III of production, including an extended consideration of the natural resources of the United States, American labor, immigration, labor problems, education, social surplus, agriculture, soil fertility, production of new species, large-scale production, transportation and its regulation. Part IV, on exchange of wealth, deals with value, money, modern finance, foreign trade, and taxation; while part V, on distribution of wealth, and part VI, on economic experiments, are comparatively brief. The treatment is interesting and vital. Throughout the book, theory is reduced to a minimum, the entire treatment of the definition and determination of value being given six pages. The extensive consideration of production is deliberate and is defensible in view of the students the book is designed to reach. There are helpful outlines at the beginning of each chapter. The references seem to the reviewer useless. To refer, for example, without page or chapter to Ripley's *Races of Europe* and to Clark's *Distribution of Wealth* would result in little use of such works by high school pupils.

Judgment upon the book will depend upon one's belief as to the purpose of economic study in secondary schools. If it is to arouse interest in social questions and the modern progressive movement by plunging the student into a discussion of the great live subjects of the day, the book must be favorably regarded. To one who thinks that an attempt to cover with young students the whole range of social and economic problems will lead to superficiality and the habit of jumping at conclusions, already such great dangers in our democracy, the book will be most objectionable. To such a person the topics for class discussion would in most cases seem better suited for prize essays for university and college students than for consideration by youths of seventeen or eighteen. The reviewer confesses to belonging to the latter class and believes that some discipline and training in clear thinking upon fundamentals should be the aim of introductory study in economics whatever may be the age and grade of the student. Nor need this necessarily be devoid of interest.

In sharp contrast to the works already considered is Professor Chapman's *Political Economy*. With remarkable consistency the author holds to an examination of fundamental abstract economic theory, or, in his own words:

Of this book, speculative results of a very general kind are the substance. . . . The explanations that will be presented are those which became current after the exact analysis of Jevons and Léon Walras had been perfected and applied to the whole field of economic phenomena by later writers, particularly by Dr. Marshall.

With no illustrations or examples, except an occasional hypothetical one, abstract modern economic theory, as based on the principle of the margin, in relation to demand, supply, monopoly, money, international trade, wages, profit and interest, and rent (to name the main chapters) is set forth concisely and ably. The only question that arises is whether such an excellent piece of work of its kind was worth doing. Although called an elementary, introductory treatment, it could not be used with young students and would be incomprehensible to the ordinary general reader. One well trained in mathematics and logic, and accustomed to sustained abstract thinking might see, as by X-ray, the skeleton of modern economics; but he would have as erroneous a conception of the vital, live economic thinking of the day as one would have of the human body who knew it only through the fluoroscope.

Vassar College.

HERBERT E. MILLS.

Esquisse d'une Théorie Générale de la Rente. By B. SAMSONOFF.
(Lausanne: F. Rouge et Cie. 1912. Pp. 245.)

Dr. Samsonoff's monograph on rent contains so many exhortations to the use of the scientific method in economics that it leaves in the end more the impression of a didactic essay than a contribution to pure theory. By the scientific method Dr. Samsonoff means the use of a system of simultaneous equations for the solution of economic problems and one must regret that he has given us instead of a concrete example of its use, a work composed two thirds of a critical resumé of the development of the concept of rent, and, as his own contribution to its theory, only certain modifications of Professor Pareto's ideas, and these arrived at by a method wholly deductive.

According to Dr. Samsonoff rent is a phenomenon of the dynamic state. It is the change in value, whether an accretion or diminution, which an economic agent may sustain by surviving from one economic equilibrium to a later one, *i.e.*, the difference between two equilibrium prices. This concept serves to distinguish rent from profit, for the latter is a phenomenon of a single economic equilibrium, *i.e.*, the difference between price and cost. The conditions necessary to the appearance of rent are, first, the dynamic condition of changing value levels; the durability of economic goods to make possible their survival from one level to another; and, finally, a state of competition so imperfect that for long periods supply is not adjusted to a change in demand. Rent, to quote Dr. Samsonoff, is an "index of the imperfection of competition." Although this description may seem to make rent equivalent to monopoly return, this is an identity which Dr. Samsonoff repudiates. He holds that monopoly is due to the voluntary control of supply by an entrepreneur and that voluntary control is not characteristic of the production of rent.

Dr. Samsonoff would thus classify as rent certain portions of incomes, *i.e.*, enduring portions whether positive or negative, due to the natural immobility of productive agents, whether the incomes are produced by land, capital, or labor. Classification of all incomes into competitive or non-competitive and division of the latter group into natural or artificial (voluntary control) may be useful, but it does not supersede classification according to source. Dr. Samsonoff suggests the employment in connection with a different classification of a term which has been associated with classification according to source. Until it is agreed to abandon this classification, it would seem that Dr. Samsonoff's use of the term

rent must breed confusion. It is to be noted that in his discussion of rent-producers, after mentioning rare talents and objects of art, Dr. Samsonoff centers his attention on land as the typical good in regard to which competition is naturally fettered.

In the historical section Dr. Samsonoff's resumé's are, in spite of an occasional eclecticism, for the most part careful. For Ricardo he solicits a respectful consideration such as is due to one of the rude forefathers of the science. In a lengthy chapter he emphasizes to such an extent the fact that in Ricardo's not very orderly exposition there is to be found an historical, a static, and a dynamic thesis, that one is forced to conclude that he overestimates the novelty of this discovery. His critical sobriety may be judged from his statements, that Professor Clark's method of determining the final productivity of an economic agent amounts to solving important economic problems "by etymology" and that a degree of charity is necessary in interpreting Professor Marshall's "expressions fautives ou maladroites."

ESTHER LOWENTHAL.

Smith College.

Grundriss einer Geschichte der Volkswirtschaftslehre. By EUGEN FRIDRICHOWICZ. (Leipzig: Duncker und Humblot. 1912. Pp. vii, 267. 6 m.)

This latest comer in the field of history of theory in general is an extremely condensed sketch of the whole development of economic thought. Its author is a member of the historical school, and he also appears to be sympathetically inclined toward socialism. Accordingly, throughout the entire work, the contrast between his ideas of "rationalism" and "historicism" is in evidence. Of the two hundred pages devoted to modern economics, one half treat of the historical school and socialism. It can hardly be said that the book is unbiased.

No attempt is made to present a chronological account of the development of economics, and this fact finds expression in a failure to associate theories with industrial environment. For example, the following order is observed in treating the men next mentioned: (1) Wieser, (2) Von Thünen, (3) St. Simon, (4) Schaeffle, (5) J. S. Mill. Hadley and Taussig are associated with Rau, Say, and James Mill.

To the reviewer the most interesting feature of the book is its classification of the subject-matter. The author distinguishes

four great classes of economics: mercantilist, rationalist, sociological, and historical; and the rationalists—those whose thought is deductive and absolute—are divided into three sub-groups as individualists, populationists, and anti-individualists. Clearly, however, this is a cross classification. There is nothing to prevent a mercantilist from being a rationalist, and the same may probably be said of a sociologist. Surely a sociologist might be both a mercantilist and a member of the historical school. A populationist, also, might be either an individualist or an anti. Such being the case, it is not surprising that we find some weird combinations. Chalmers, Lauderdale, Sismondi, Von Haller, Adolph Wagner, Naumann, and Minghetti, are grouped together as “religious, ethical, and social rationalists.” St. Simon is put with Louis Blanc and Lassalle. Effertz and Landry are classed as socialists. Plainly, the work suffers from the desire of the author to draw sharp lines between broad classes.

An astounding ignorance of American economists is displayed. Take the section on the American historical school, for instance. After remarking that the school took its inception from Germany through the medium of students in German universities and German-Jew immigrants, the author states that the chief representatives of historical economic thought *are* Dunbar, Patten, and Bolles! Incidentally, Seligman, Ely, and Münsterberg(!) are also said to be worthy of mention. The two centers of the school, we are told, are the American Economic Association and “Harward-University.” Yet Taussig classes with James Mill and McCulloch!

The chief merit of the book will probably be found to be its concise catalog of names and writings of German economists who are classed as members of the historical and socialist school. This is the more useful for the reason that there is a full index of names. Another good feature is the analysis of mercantilist policies.

LEWIS H. HANEY.

University of Texas.

NEW BOOKS

BAILLIERE, Y. *L'oeuvre économique de Charles Davenant*. (Poitiers: G. Roy. 1913. Pp. viii, 184.)

BRANDEAU, N. *Principes de la science morale et politique sur le luxe et les lois somptuaires (1767)*. Collection des économistes et le réformateurs sociaux de la France, 9. (Paris: Geuthner. 1912. Pp. xix, 38.)

BARNARD, W. G. *Regulation*. (Seattle, Wash.: Regulation Pub. 1913. Pp. 124. \$1.)

Discusses the question of distribution of production between the four agents of distribution.

BELIN, J. P. *Le mouvement philosophique de 1748 à 1789. Etude sur la diffusion des idées des philosophes à Paris, d'après les documents concernant l'histoire de la librairie*. (Paris: Belin Frères. 1913. 7.50.)

BOCKARD, A. *Les lois de la sociologie économique*. (Paris: Marcel & Cie. 1913. Pp. 352. 8 fr.)

BURKE, E. J. *Political economy, designed for use in Catholic colleges, high schools and academies*. (New York: American Book Co. 1913. Pp. 16, 479. \$1.40.)

To be reviewed.

CORNELISSEN, C. *Théorie de la valeur, avec une réfutation des théories de Rodbertus, Karl Marx, Stanley Jevons et Böhm-Bawerk*. Second edition, revised. (Paris: Giard & Brière. 1913. 10 fr.)

DEVNEY, J. J. *Individualism, the solution of our economic problems*. (Cleveland, O.: Individualist Pub. Co. 1912. Pp. 66. 25c.)

EICHHORN, K. *Wirtschaftspolitik und Volkswirtschaft*. (Hildesheim: August Lax. 1913. Pp. 30. 0.80 m.)

GIDE, C. *Cours d'économie politique*. Third edition, revised and enlarged. (Paris: Larose & Tenin. 1913. 12 fr.)

GIDE, C. and RIST, C. *Histoire des doctrines économiques depuis les physiocrates jusqu'à nos jours*. Second edition, revised and enlarged. (Paris: Larose & Tenin. 1913. Pp. xviii, 786. 12.50 fr.)

GRUENFELD, J. *Die leitenden sozial- und wirtschaftsphilosophischen Ideen in der deutschen Nationalökonomie und die Ueberwindung des Smithianismus bis auf Mohl und Hermann*. Studien zur Sozial-, Wirtschafts- und Verwaltungsgeschichte, 9. (Vienna: Konegen. 1913. Pp. x, 114. 3 m.)

HADLEY, A. T. *Some influences of modern philosophic thought*. (New Haven: Yale University Press. 1913. Pp. vii, 146. \$1.)

HUYBRECHTS, P. *Tableaux synoptiques d'économie politique*. (Bruges: St. Catherine Press. 1912. Pp. 57.)

VON KETELHODT, G. F. *Das Werturteil als Grundlage der Lehre vom Wert*. (Leipzig: Duncker & Humblot. 1913. Pp. iv, 70. 2 m.)

KOBATSCH, R. *La politique économique internationale*. Adapted from the German by G. PILATI and A. BELLACO. (Paris: Giard & Brière. 1913. Pp. vii, 496. 12 fr.)

To be reviewed.

LEWIS, A. M. *An introduction to sociology*. (Chicago: Kerr. 1913. Pp. 215. \$1.)

MASCI, G. *La dottrina del valore di concorrenza*. (Naples: Sangio-
vanni & Figlio. 1912. Pp. 159.)

McKILLOP, M. and ATKINSON, M. *Economics, descriptive and theoretical*. Part I. *Descriptive*, by MARGARET MCKILLOP. Part II. *Theoretical*, by MABEL ATKINSON. Introduction by E. J. URWICK. (London: Allman & Son. 1912. Pp. xiii, 216. 3s. 6d.)

This brief textbook for beginners proceeds from facts to principles. Part II states the classical doctrines of economics and some of their recent modifications. Part I describes the phenomena of English social life in common words, and aims to make this description bring home to the student the need of more technical analysis and interpretation and the need of accurate terminology. The descriptive economics of part I does not aspire to teach economic history. While incidentally it sketches the development of English life and industry from primitive times, the writers recognize that economic history cannot be taught properly without the use of technical terms. The authors, both of whom are lecturers in King's College for Women, of the University of London, have aimed to make their book specially suitable for use in girls' schools; but the excellent discussion of such subjects as household budgets and the economic relations between the household and society seems equally suitable for young men.

The text is a model of attractive simplicity. The style, while succinct, is lively and stimulating. The student's attention is constantly directed to the significance of everyday matters, and the beginner is led to utilize in his economic thinking the mass of disjointed facts with which he is already, in a shallow way, familiar.

MORTON A. ALDRICH.

MEMBERS OF THE DEPARTMENT OF POLITICAL ECONOMY OF THE UNIVERSITY OF CHICAGO. *Material for the study of elementary economics*. (Chicago: University of Chicago Press. 1913. Pp. 900. \$3.)

MURDOCH, J. G. *Economics as the basis of living ethics*. (Troy, N. Y.: Allen Bk. & Prtg. Co. 1913. Pp. x, 873, vi. \$2.)

To be reviewed.

OSORIO, A. *Théorie mathématique de l'échange*. Translated by J. d'ALMADA. (Paris: Giard & Brière. 1913. 9 fr.)

PARKINSON, H. *A primer of social science*. (London: King. 1913. Pp. 288. 2s.)

Designed for the use of Catholics interested in social questions.

PESCH, H. *Lehrbuch der Nationalökonomie*. Vol. III. *Allgemeine Volkswirtschaftslehre, II: Die aktiven Ursachen im volkswirtschaftlichen Lebensprozesse*. (Freiburg i.B.: Herdersche Verlagsh. 1913. Pp. xii, 946. 20 m.)

RODBERTUS-JAGETZOW, C. *Aus dem literarischen Nachlass*. Edited by A. WAGNER and T. KOZAK. Vol I. *Das Kapital. Vier sozialer Brief an von Kirchmann*. Second edition. (Berlin: Puttkammer & Mühlbrecht. 1913. Pp. xiv, 223. 3 m.)

ROSCHER, W. *System der Volkswirtschaft. Ein Hand- und Lesebuch für Geschäftsmänner und Studierende*. Vol. III. *Nationalökonomik*

des Gewerbefleisses und Handels. Eighth edition revised by W. STIEDA. Part I. *Nationalökonomik des Gewerbefleisses.* (Stuttgart: J. G. Cotta. 1913. Pp. xviii, 618. 12 m.)

SCHELLE, G. *Oeuvres de Turgot et documents le concernant, avec biographie et notes.* Vol. I. (Paris: Alcan.)

SCHREY, M. *Kritische Dogmengeschichte des ehernen Lohngesetzes.* (Jena: Fischer. 1913. Pp. iv, 133. 3.50 m.)

SEAGER, H. R. *Seager's principles of economics.* Being a revision of *Introduction to Economics.* (New York: Holt. 1913. Pp. 642. \$2.25.)

To be reviewed.

STEFFEN, G. F. *Die Grundlage der Soziologie. Ein Programm zu der Methode der Gesellschaftswissenschaft und Naturforschung.* (Jena: Diederichs. 1912. Pp. 132. 3 m.)

TUGAN-BARANOWSKY, M. *Soziale Theorie der Verteilung.* (Berlin: Springer. 1913. Pp. 82. 3 m.)

WEBER, L. *Le rythme du progrès.* (Paris: Alcan. 1913. Pp. xiv, 311. 5 fr.)

WITTE, S. J. *Vorlesungen über Volks- und Staatswirtschaft.* Authorized translation by J. MELNIK. (Stuttgart: Deutsche Verlagsanstalt. 1913. Pp. xxvii. 277. 7.50 m.)

Papers and proceedings, seventh annual meeting American Sociological Society. Vol. III. *The conception of human interrelations as a variant of social theory.* (Chicago: University of Chicago Press. 1913. Pp. 223. \$1.50.)

Economic History and Geography

The Land System in Maryland in 1720-1765. By CLARENCE P. GOULD. Johns Hopkins University Studies in Historical and Political Science, Series XXXI, No. 1. (Baltimore: The Johns Hopkins Press. 1913. Pp. 101. \$.75.)

Dr. Gould's monograph forms part of a larger work still in preparation on the economic history of Maryland in the same period. This is welcome news to students wishing to search colonial data for light on any modern economic arrangement. In the case of most of the thirteen colonies, there is still need of such investigation as this. Mr. Weeden has already done it in part for New England and Mr. Bruce for Virginia. These advance chapters contain a scholarly presentation of facts drawn from the best sources and arranged chronologically. The main points discussed are the method of granting land, the feudal burdens on it, and its development by speculators. The closing chapter on

manors is simply an extended illustration of the facts already given.

It is made clear that the lord proprietor very largely dominated the land situation in Maryland; that his great aim was to create a permanent colonial revenue by exploitation of the soil. The land was regarded as his private property and the land office as his private affair, consequently the colonial assembly rarely interfered. In actual operation, however, the proprietor's policy was limited by existing conditions. The most noteworthy contribution in the book concerns the effect of the quit-rent, both for good and evil, on Maryland's development (p. 57). The author thinks it can scarcely be doubted that the annual quit-rent, payable in sterling, materially retarded the progress of the colony. According to Dr. Gould, this special tax, added to the other taxes and to the heavy costs of the land office, caused the burdens resting on Maryland land to be greater in their entirety than in either Pennsylvania or Virginia. He thinks this fact explains without doubt why the Germans (and many other families, probably) at first avoided Maryland in their advance into the Great Valley, and passed from Pennsylvania across into Virginia (p. 57). One wishes this point had been developed a little more, with quotations or references, and that the attractive conditions in Virginia for taking up land had been emphasized by way of contrast. On the other hand, the quit-rent (and the purchase price in a lesser degree) had a beneficial effect, says the writer, in preventing the monopolizing of land by a few individuals. This state of things brought about smaller holdings, less woodland, and more people. The quit-rent thus seems from this study to be responsible to a degree for those colonial characteristics that differentiated Maryland from her neighbors.

Dr. Gould differs from N. D. Mereness (*Maryland as a Proprietary Province*, p. 82) in his interpretation of the opposing attitude of the Eastern Shore and Western Shore delegates in the Assembly, on the matter of commuting the quit-rent to a fixed duty on the tobacco exported (p. 39). He thinks it accounted for by the different products of the two shores. He believes the Western Shore tobacco raisers objected to having their crop taxed to pay the quit-rents of the Eastern grain growers.

The chapter on land management would be improved by condensation. Here the author brings out interestingly the connection between the disappearance of the frontier (in the older

counties) and the rise of tenant-farming (p. 83). An exceptional case in which speculators placed tenants on wild lands occurred in two counties (p. 86); this was due to the special conditions in which the newly-arrived German immigrants found themselves.

The quoted passages and footnotes are excellent but there is no bibliography. Few conclusions are drawn or comparisons made with conditions in other colonies. The significance of some of those Maryland practices in foreshadowing features of our present national land system might well have been brought out; as, for example, the custom of granting land free to settlers on backlands and on disputed borders, which reflects our modern homestead law, and the requirement for rectangular surveys in regular order (however disregarded), which suggests our present system of rectangular surveys on public lands.

AMELIA C. FORD.

Milwaukee-Downer College.

The Agrarian Problem in the Sixteenth Century. By R. H. TAWNEY. (New York: Longmans, Green and Company. 1912. Pp. ix, 464. \$3.00.)

Several books on English agrarian history have recently appeared, each endeavoring to restate the old problems from the writer's point of view and usually advancing some new information, not very great in quantity. Mr. Tawney's is one of the best of these. They are not primarily books based upon extensive research like Professor Savine's studies in copyholds or Professor Gay's in enclosures. While so many sources in the archives remain unread, they cannot hope to be final pronouncements upon the topics of which they treat. Useful as popularizations and as summaries, they are sign-posts suggesting the roads which may lead to the still hidden knowledge of English agrarian development. Earliest of them was Mr. Gilbert Slater's studies of eighteenth century enclosures, based upon parliamentary acts and contemporary literature. Soon the Rev. A. H. Johnson published his Ford lectures on the *Disappearance of the Small Landowner*. Last year Mr. E. K. Gonner reviewed in lengthy wise the enclosure literature, adding thereto information from the records of the Privy Council which he had already published in the "English Historical Review."

Mr. Tawney limits his work to the sixteenth century. Inclination

ing somewhat to verbosity, his discussion is none the less thoughtful and his judgment excellent. He adopts the conclusions of his ablest predecessors and is able to add some fresh material in support of his views. The result is a satisfactory and informing survey of the agrarian situation in the sixteenth century so far as we now know about it. The chief defect of the book is the scanty nature of the evidence upon which many of the generalizations are based. Mr. Tawney need not apologize, as he does in his preface, for including statistical tables. Would that they were far more comprehensive than they are!

In the first half of the book the author is concerned to show the prosperity attained by the peasantry at the beginning of the sixteenth century. When he wishes to demonstrate the preponderance of customary tenants over freeholders and leaseholders, he marshals the numbers of each group from one hundred and eighteen manors. So few instances, however, very inadequately represent the thousands of English manors. One large Lancashire manor sharply diverges from the dozen others in the north and vitiates the ratio. The selection by regions is unhappy. From Norfolk and Suffolk come one third of all the manors, while the Midlands are represented by only twenty-two and the west by none whatever. Lastly, the number of persons in a group does not represent its relative importance. Areas held by each group would be more to the point, since freeholders and leaseholders usually held less land than copyholders.

The attempt in Table III to separate customary tenants from copyholders and tenants-at-will is misleading. All belong to the same group and the surveys are careless in interchanging the terms. Some customary tenants did not yet have copies of the record of the court roll, as, indeed, most did not in the days of commutation. The term tenant-at-will, though occasionally applied to a lessee, usually meant a customary tenant (a copyholder if he had a copy). The designation arose from the second half of the phrase by which the copyholder is technically described, *tenens per copiam rotuli curiae ad voluntatem domini*.

One of the most suggestive parts of Mr. Tawney's book is this discussion of the rise of a class of well-to-do copyholders. As a result of thrift and easy conditions of land-transference, many a customary tenant, he thinks, at some time between the thirteenth and sixteenth centuries made additions to his traditional virgate. Whereas there had once been substantial equality of land-holding

among the virgaters, there had come to be marked inequality. Fifty-two surveys of the sixteenth century are tabulated to show the results of such a process. Undoubtedly a change of this sort was in progress and deserves attention—much more than Mr. Tawney was able to give to it. He admits that he can offer no quantitative measurements and he is vague as to what period and what occurrences within the three hundred years are responsible for the tendency. Generalization in these matters without an examination of many court rolls and the conditions attendant upon the Black Death is scarcely safe. Besides this increase in the size of some customary holdings, the fixity of customary rents contributed to the formation of a prosperous peasantry. This is explained and illustrated, but not for the first time. In this connection it could well have been noted that the surveys often estimate the annual value of a customary holding as well as the rent and that the divergence of the two can be accurately determined.

Having argued for the prosperity of the peasantry at the beginning of the century, Mr. Tawney proceeds to inquire why it did not continue. In answer he passes judgment upon current explanations—the increase of enclosures and the uncertainty of some tenures. To the enclosure literature he adds little that is new, unless it be the contention that the tenants initiated a movement, later pushed on by less scrupulous lords. But his evidence here is slight. Enclosure, he continues, in the course of the century increased the size of the demesne farm, but again the cases which he adduces are largely from two counties and are without earlier standards of comparison.

Apropos of the disputed question whether engrossed land was devoted to arable or pasture he compiles the respective amounts of arable, meadow and pasture on the demesne farms of fifty manors. These instances, once more, are too few, too much confined to Norfolk and Wiltshire, too diverse in their indications to admit of the generalizations which the author is inclined to draw. The observation that “the large farmer was by no means always a grazier” is worthy of further development, though Mr. Tawney’s thesis leads him to emphasize the pasture farms.

This thesis that customary holdings were suffering considerably from the enclosures of the lords is far less supported by proof than the argument regarding tenures. The latter is excellently stated. Mr. Tawney follows Professor Savine in correctly esti-

inating the dire significance of copyholds for lives and the uncertainty of fines. He adds sixty to Professor Savine's eighty-two manors. He goes farther and gives a few instances of the considerable increase of fines during the century. Above all, he interprets admirably the relation of this to the economic movements of the century. It was one of the important methods by which the landlords recouped themselves for the loss of income due to the depreciation of the fixed customary rents in the price revolution of the century.

A chapter on the attitude of the state toward the agrarian situation brings to a close this eminently sane and readable book.

H. L. GRAY.

Harvard University.

NEW BOOKS

BARTHOLOMEW, J. G. *A school economic atlas*. Revised edition. (Oxford: Clarendon Press. 1912. Pp. 6. 2s.)

BARTLING, K. *Handels- und Verkehrsgeographie*. Two volumes. (Leipzig: List & von Bressensdorf. 1912. Pp. viii, 123; 204. 1.50 m. each.)

BERGASSE, L. *Notice historique sur la chambre de commerce de Marseille (1599-1912)*. (Marseilles: Barlatier. 1913.)

BLAGOWIESTSCHENSKY, G. *Die wirtschaftliche Entwicklung Turkestans*. Rechts- und staatswissenschaftliche Studien, 46. (Berlin: Ebering. 1913. Pp. 197, illus. 6 m.)

BOERNER, A. *Kölner Tabakhandel und Tabakgewerbe, 1682-1910*. (Essen: Baedeker. 1912. Pp. xiii, 249. 6 m.)

BONNARD, L. *La navigation intérieure de la Gaule à l'époque gallo-romaine*. (Paris: Picard. 1913. Pp. 267. 5 fr.)

CALDERON, F. G. *Latin America; its rise and progress*. South American series. (London: Unwin. 1913. Pp. 406, illus. 10s. 6d.)

CHATTERTON, A. *Industrial evolution in India*. (Madras: The Indu Office. 1912. Pp. 369. 3s.)

CLAY, J. *Letters of Joseph Clay, merchant of Savannah, 1776-1793, and a list of ships and vessels entered at the port of Savannah, for May 1765, 1766, and 1767*. (Savannah, Ga.: Morning News. 1913. Pp. 259. \$3.50.)

DE CREVECOEUR, J. H. ST. J. *Letters from an American farmer, 1735-1813*. Introduction and notes by BARTON BLAKE. Everyman's library. (New York: Dutton. 1913. Pp. xxiii, 256. 35c.)

Originally printed in London in 1782 and in Philadelphia ten years later, these charming letters have after a lapse of a century been three times reprinted during the last decade. Crèvecoeur

was a Frenchman who emigrated to America in 1760, and during a stay of twenty years in this country wrote an idealized account of rural life here. While the chief appeal is to the *literateur*, the economist will find ample reward in reading these vivacious pages. This edition is both convenient and inexpensive. E. L. B.

DAWSON, W. H. *Industrial Germany*. (London: W. Collins. 1918. Pp. 264. 1s.)

DEUTSCHMANN, A. *Zur Entstehung des Deutsch-Tiroler Bauernstandes im Mittelalter*. (Innsbruck: Tyrolia. 1918. Pp. 168.)

DOPSCH, A. *Die Wirtschaftsentwicklung der Karolingerzeit vornehmlich in Deutschland*. Two volumes. (Weimar: Böhlau. 1918. Pp. viii, 364. 9 m.)

DORN, A. *Deutsche Handwerker im mittelalterlichen Italien*. (Berlin: R. L. Prager. 1918. Pp. vi, 160. 5 m.)

FULLER, G. N. *Economic beginnings of Michigan: the settlement of Michigan Territory*. (Ann Arbor: University of Michigan. 1918.)

GEERING, T. B. *Grundzüge einer schweizerischen Wirtschaftsgeschichte*. (Bern: Stämpfli & Cie. Pp. 48. 1.80 m.)

VON HÄEPKE, R. *Niederländische Akten und Urkunden zur Geschichte der Hanse und zur deutschen Seegeschichte*. Herausgegeben vom Verein für hanseatische Geschichte. Vol. I. 1531-1557. (Leipzig: Duncker & Humblot: 1918. Pp. xviii, 684. 39.60 m.)

HESSE, A. *Die wirtschaftliche Entwicklung des deutschen Reiches*. (Jena: Fischer. 1918. Pp. vi, 56. 1.60 m.)

HOWARTH, O. J. R. *Commercial geography of the world*. (New York: Oxford University Press. 1918. Pp. 236, 33 diagrams. 1918. 60c.)

ISCHCHANIAN, B. *Die ausländischen Elemente in der russischen Volkswirtschaft. Geschichte, Ausbereitung, Berufsgruppierung, Interessen und ökonomisch-kulturelle Bedeutung der Ausländer in Russland*. (Berlin: Siemenroth. 1918. Pp. xviii, 300. 7 m.)

LAMP, F. *Die Getreidehandelspolitik in der ehemaligen Grafschaft Mark während des XVIII. Jahrhunderts*. (Münster: Coppenrath: 1912. Pp. vii, 191. 3.50 m.)

LAUBER, A. W. *Indian slavery in colonial times within the present limits of the United States*. Columbia University studies in history, economics, and public law, LIV, 3. (New York: Longmans. 1918. Pp. 352. \$3.00.)

LEVY, H. *The beginning of economic liberalism in England*. (London: Macmillan. 1918.)

MAGNUS, F. *Aegypten. Seine volkswirtschaftlichen Grundlagen und sein Wirtschaftsleben*. (Tübingen: Mohr. 1918. Pp. xvi, 252. 6 m.)

McMASTER, J. B. *A history of the United States from the Revolution*

- to the Civil War. Vol VIII. 1850-1861. (New York: Appleton. 1913. Pp. 19, 556. \$2.50.)
- MALINIAK, J. *Die Entstehung der Exportindustrie und des Unternehmerstandes in Zürich im 16. und 17. Jahrhundert.* Zürcher volkswirtschaftliche Studien, 2. (Zürich: Rascher & Co. 1913. Pp. 135. 4 m.)
- MARVAUD, A. *L'Espagne au xx^e siècle.* (Paris: Colin. 1913. Pp. xiv, 515. 5 fr.)
- MICHEL, G. and KNAPP, C. *Documents cartographiques de géographie économique.* (Paris: Payot & Cie. 1913. 7.50 fr.)
- PARCE, L. *Economic determinism; or, the economic interpretation of history.* (Chicago: Kerr. 1913. Pp. 155. \$1.)
- PREUSSE-SPERBER, O. *Süd- und Mittel-Amerika. Seine Bedeutung für Wirtschaft und Handel.* (Berlin: O. Salle. 1913. Pp. vi, 218, illus. 5 m.)
- REIMANN, G. P. *Das Tabaksmonopol Friedrichs des Grossen.* (Leipzig: Duncker & Humblot. 1913.)
- REY, H. *La vie économique de la Suède.* (Paris: Plon-Nourrit & Cie. 1913. 3 fr.)
- RODERICH-STOLTHEIM, F. *Die Juden im Handel und das Geheimnis ihres Erfolges. Zugleich eine Antwort und Ergänzung zu Sombarts Buch "Die Juden und das Wirtschaftsleben."* (Steglitz: P. Hobbins. 1913. Pp. iv, 254. 3.50 m.)
- RUSSELL, J. H. *The free negro in Virginia 1619-1865.* Johns Hopkins University studies in historical and political science, XXI, 3. (Baltimore: Johns Hopkins Press. 1913. Pp. viii, 194.)
- SALZMANN, L. F. *English industries of the Middle Ages.* (Boston: Houghton Mifflin. 1913. Pp. x, 260. \$2.)
To be reviewed.
- SIEVEKING, H. G. H. *Sieveling, Lebensbild eines Hamburgischen Kaufmannes aus dem Zeitalter der französischen Revolution.* (Berlin: Karl Curtius. 1913. Pp. xii, 547. 7 m.)
- SMITH, J. R. *Industrial and commercial geography.* (New York: Holt. 1913. Pp. 902. \$4.)
To be reviewed.
- SMALL, A. W. *Between eras from capitalism to democracy; a cycle of conversations and discourses with occasional side-lights upon the speakers.* (Kansas City, Mo.: Inter-Collegiate Press. 1913. Pp. 431. \$1.65.)
- SOMBART, W. *The Jews and modern capitalism.* Translated, with notes, by M. EPSTEIN. (New York: Dutton. 1913. Pp. xvi, 402, \$5.)
This work, in the German original, was favorably reviewed by Max J. Kohler in the REVIEW, vol. II, pp. 81-84 (March, 1912).

Epstein, the translator, performed a similar service for Sombart's well-known work *Sozialismus und Soziale Bewegung*, published in England under the title *Socialism and the Social Movement*. In the present prompt translation there are some brief omissions, as the discussion of the modern race theory and the early history of credit instruments. Sombart's animated style does not suffer in the translation.

SZTERENYI, J. *Die ungarische Industriepolitik*. (Vienna: Manz. 1913. Pp. iii, 41. 1.30 m.)

TOPE, J. L. *The industrial South*. (Chicago: Rand, McNally. 1913. Pp. 32.)

UNDERWOOD, J. J. *Alaska, an empire in the making*. (New York: Dodd, Mead & Co. 1913. Pp. xvi, 440, illus. \$2.)

WEISS-BARTENSTEIN, W. K. *Bulgariens volkswirtschaftliche Entwicklung bis zum Balkankriege mit besonderer Berücksichtigung des Finanzwesens*. (Berlin: D. Reimer. 1913. Pp. viii, 151. 3 m.)

WINCKLER, A. *Die deutsche Hansa in Russland*. (Berlin: Prager. 1913. Pp. vi, 153. 4 m.)

WISE, B. R. *The making of the Australian commonwealth (1889-1900.) A stage in the growth of the empire*. (New York: Longmans. 1913. Pp. xiv, 366. \$2.50.)

Bibliographie Lorraine. Revue du mouvement intellectuel, artistique et économique de la région. (Nancy-Paris: Berger-Levrault. 1912. Pp. 256. 5 fr.)

Die wirtschaftlichen Kräfte Deutschlands. Ueberreicht von der Dresdner Bank, Berlin, anlässlich ihres 40jährigen Bestehens. (Berlin. 1913.)

Agriculture, Mining, Forestry, and Fisheries

Social and Economic Survey of a Rural Township in Southern Minnesota. By CARL W. THOMPSON and G. P. WARBER. (Minneapolis: University of Minnesota. 1913. Pp. v, 75.)

If X township in Minnesota is representative of rural America it indicates a one-sidedness, by no means pleasing, in our national development. On the purely economic side appears the prosperity so prevalent in the Mississippi Valley. The tendencies of farm organization have been those even more widely known in much of Europe as well as America—especially a decline in grain raising and an increase both in the number of cattle, chiefly of milch-cows, and their value per head. The roads are not exceptionally bad; there are successful farmers' creameries, and elevators, and mutual insurance; the credit situation is satisfactory. But the intellectual life is palpably deficient. The growth of agricultural

knowledge has been chiefly limited to certain principles forced into notice by obvious necessity—as the exhausting effect upon soil of continued grain raising. Only 14 per cent of the farmers attend farmers' institutes. Most of the others say they know "at least as much about their business as an outsider." The books and papers read are seldom above the trivially entertaining. There is little interest in politics or political meetings, and little knowledge of the wider economic conditions affecting the farmers' condition ("prices are what they are simply because town men won't pay more"). Business morality reflects the prevailing intellectual limitation. In agreements which he fully understands the farmer is still fairly honest, "but in the fulfillment of contracts of some complexity the exact meaning and implication of which he does not understand, there are those who are not always honest." Thus the essential character of coöperation as resting on a basis of morality, of subtle obligation, escapes them; "they are coöperating successfully, yet they themselves have no confidence in coöperation; . . . they feel that the farmer won't stick." It doubtless signifies something other than a lack of cleanliness that "the school house floor is scrubbed usually once a year." There is a general failure to condemn the present uneffective pretense of road making and repair by the farmers themselves; only 28 per cent were heartily in favor of a central control "by a county road engineer, whose business it would be to make out plans and specifications of roads and grades, bridges and all, the actual construction to be left to contractors with their own labor and outfits."

As to remedies, the farmers say, "The only way to improve country life is to make it return bigger profits, big money returns are needed, not only big crops." It may, however, fairly be doubted whether there can be improvement in crops, morality, or the social life of the neighborhood without some strong stimulation to the life intellectual. One old farmer complains that "the things they take up in the schools all tend to direct the thought toward what man has done and is doing in the cities, . . . instead of leading the youth to think about the natural sciences as they connect with the hills, the wood and all the well-known life about them." Perhaps this observation may point the way to salvation. A few country schools in different states have, by instruction in the sciences relating to agriculture and even science specifically agricultural, succeeded in awakening a new interest, appealing to the "practical" spirit in showing that there is delight in the use of one's mind. The appetite for that sober intoxicant,

once acquired, will never be lost. It is to be noticed that while the older men generally despise "scientific agriculture," the younger generation thinks that "a little brains often save much elbow grease." "The boys who read generally interest themselves in farm papers or some scientific article in a magazine."

The Minnesota survey appears to have been well planned and intelligently carried out, though the report suffers from crudeness in the use of English.

A. P. WINSTON.

Pearre, Maryland.

NEW BOOKS

ARNOULD, C. *Constructions rurales économiques et améliorations agricoles.* (Paris: J. B. Baillière. 1913. Pp. 464, illus.)

BLANK, S. *Die Landarbeiterverhältnisse in Russland seit der Bauernbefreiung.* Zürcher volkswirtschaftliche Studien, 3. (Zürich: Rascher & Co. 1913. Pp. 224. 6.50 m.)

BUCK, S. J. *The granger movement.* (Cambridge: Harvard University Press. 1913. Pp. 384. \$2.)

To be reviewed.

CAHILL, J. R. *Report of an enquiry into agricultural credit and agricultural co-operation in Germany.* Cd. 6626. (London: Wyman. 1913. Pp. xxxvi, 528. 5s.)

COLEMAN, A. P. *The nickel industry: with special reference to the Sudbury region, Ontario.* (Ottawa: Department of Mines. 1913. Pp. viii, 206, illus.)

DAHLINGER, C. W. *The new agrarianism.* (New York: Putnam. 1913.)

To be reviewed.

DUNLOP, O. J. *The farm labourer: the history of a modern problem.* (London: Unwin. 1913. 7s. 6d.)

ENGELBACH, H. *Notes et observations sur l'industrie houillère aux Etats-Unis.* (Paris: Dunod & Pinat. 1913. 8 fr.)

FAASS, F. *Die Rechtsverhältnisse der land- und forstwirtschaftlichen Arbeiter Deutschlands.* (Berlin: Buchh. Vorwärts. 1913. Pp. 122. 2 m.)

HARBOUR, H. *Rural England; or, farming, farmers, and farmers' men.* (New York: Pitman. 1913. Pp. 3, 210. 60c.)

HEATH, F. G. *British rural life and labour.* (London: King. 1913. 10s. 6d.)

HINCKES, R. T. *The farmer's outlook. A review of home and overseas agriculture, 1880-1913.* (London: Jarrold & Sons. 1913. Pp. 140, 1s. 6d.)

- HORNBY, M. L. *How to buy land in Canada.* (London: Black. 1913. 1s. 6d.)
- JAMES, A. F. B., compiler. *Nitrate facts and figures, 1913.* (London: Accountant. 1913. Pp. 12, 5 charts. 2s. 6d.)
- KRUVANEC, F. *Die Bodenmelioration und ihre Bedeutung für die Volkswirtschaft.* Publikationen des Zentralkollegiums des Landeskulturrates für das Königreich Böhmen, 7. (Prag: J. G. Calve. 1913. Pp. 61. 1.20 m.)
- LONG, J. *Making the most of the land.* (London: Hodder & Stoughton. 1913. Pp. 296. 5s.)
- LUDIN, A. *Die Wasserkräfte, ihr Ausbau und ihre wirtschaftliche Ausnutzung. Ein technisch-wirtschaftliches Lehr- und Handbuch. Preisgekrönt von der Kgl. Akademie des Bauwesens in Berlin.* Two volumes. (Berlin: Springer. 1913. Pp. xvi, 1405, illus. 60 m.)
- PHELAN, J. *A brief course in rural economics and rural sociology.* (Eau Clair, Wis.: Eau Clair Book and Stationery Co. 1913. 35c.)
- REW, R. H. *An agricultural fagot.* (London: King. 1913. 5s.)
- SCHLOSSMANN, MUELLER, SCHWARZ. *Die Milchversorgung in den Grossstädten.* (Hannover: M. & M. Schafer. 1913. Pp. 40. 0.50 m.)
- SCHLUZ, A. *Die Geschichte der kultivierten Getreide. I.* (Halle: L. Nebert. 1913. Pp. vii, 134. 3 m.)
- SCHUSTER, A. N. *Die argentinische Fleisch-Industrie.* (Diessen: J. C. Huber. 1913. Pp. 337-403, illus. 2.50 m.)
- STAHER, M. *Fischhandel und Fischindustrie.* (Stuttgart: Enke. 1913. Pp. viii, 368, illus. 12 m.)
- SUTHERLAND, W. *Rural regeneration in England.* (London: King. 1913. 2s.)
- VAN BARNEVELD, C. E. *Iron mining in Minnesota.* (Minneapolis: University of Minnesota. 1912. Pp. 214, illus. \$1.)
- ZOLLA, D. *L'agriculture moderne.* (Paris: Flammarion. 1913. 3.50 fr.)
- *Economic minerals and mining industries of Canada.* (Ottawa: Department of Mines. 1913. Pp. 77, illus.)

Manufacturing Industries

NEW BOOKS

- BECKER, A. *Die Stolberger Messingindustrie und ihre Entwicklung. Staats- und sozialwissenschaftliche Forschungen, 168.* (Munich: Duncker & Humblot. 1913. Pp. viii, 83. 2.50 m.)
- CHITTICK, J. *Silk manufacturing and its problems.* (New York: J. Chittick. 1913. Pp. xvi, 432. \$2.50.)

- DEHN, R. M. R. *The German cotton industry*. Manchester University publications. (New York: Longmans. 1913. Pp. x, 104. 75c.)
- HUNTER, J. A. *Wool, from the raw material to the finished product*. Pitman's common commodities of commerce. (New York: Pitman. 1913. Pp. 8, 118. 75c.)
- PASSARDI, R. *Le industrie del cotone*. (Torino: Unione tip. ed. 1913. Pp. 292.)
- RIDEAL, C. F. *The history of the E. I. Du Pont de Nemours powder company; a century of success*. (New York: Business America. 1912. Pp. 224. \$1.50.)
- SCHMIDT, E. *Fabrikbetrieb und Heimarbeit in der deutschen Konfektionsindustrie*. Tübinger staatswissenschaftliche Abhandlungen, 23. (Stuttgart: Enke. 1912. Pp. 199.)
- SCHWARZ, A. *Die Lage der österreichischen Baumwollspinnerei*. (Vienna: Manz. 1913. Pp. v, 78. 1.90 m.)
- SMITH, C. H. *The by-product coking industry of America*. (New York: C. H. Smith. 1913. Pp. 50.)
- STREIT, F. *Die Granitindustrie des Fichtelgebirges*. (Munich: Eduard Pohl. 1913. Pp. 116. 3 m.)
- SURFACE, H. E. *Bibliography of the pulp and paper industries*. United States forest service bulletin, 123. (Washington: U. S. Dept. of Agriculture. 1913. Pp. 48.)
- WOLFF, R. *Die Jute. Ihre Industrie und volkswirtschaftliche Bedeutung*. (Berlin: Siemenroth. 1913. Pp. 147. 6 m.)
- *Manufactures, 1909. General Report and Analysis*. Thirteenth census of the United States taken in the year 1910, Vol. VIII. (Washington: Dept. of Commerce. Bureau of the Census. 1913. Pp. 845.)
- *Manufactures for 1910 as enumerated in June, 1911*. Fifth census of Canada, 1911, Vol. III. (Ottawa: Census Office. 1913. Pp. xvii, 432.)
- *Thirty years of New York, 1882-1912. Being a history of electrical development*. (New York: Edison Co. 1913. Pp. ix, 264.)

Transportation and Communication

NEW BOOKS

- BOEGLER, A. *Die finanziellen Ergebnisse der bayerischen Post- und Telegraphenverwaltung*. (Leipzig: Deichert. 1913. 2.40 m.)
- BUSZ, H. *Die deutsche Rheinmündung*. (Münster: i.W.: F. Coppenrath. 1913.)
- CUNNINGHAM, W. J. *The administration of the state railways of Prussia-Hesse*. (New York: E. C. Bruen, 41 Barclay St. 1913. Pp. 88. 10c.)

- CURRAN, J. P. *Freight rates; studies in rate construction.* (Chicago: Railway Text-book Pub. Co. 1913. Pp. v, 367. \$5.)
- FEUILLE, F. *Panama canal tolls.* Sen. Doc. 40, 63 Cong., 2 Sess. (Washington: Isthmian Canal Commission. 1913. Pp. 15.)
Author is law officer of Isthmian Canal Commission.
- FAIRBAIRN, F. W. *Rate construction guide, showing how to compute through freight rates from Indiana, Michigan (southern peninsula), Ohio, western parts of New York, Pennsylvania, and West Virginia, also Chicago, Milwaukee and Peoria districts to all points in the United States.* (Cleveland, O.: Britton Pr. 1913. Pp. 4, 94. \$5.)
- HENTRICH. *Der Rhein-Maas-Schelde-Kanal von Crefeld nach Antwerpen.* (Crefeld: Verlag von Worms und Lüthgen. 1913.)
- HUBEL, P. *Deutsches Post- und Telegraphenwesen unter besonderer Berücksichtigung der gesamten Literatur.* (Munich: Andelfinger. 1912. Pp. xi, 98.)
- JOHNSON, M. *The magnate or the people; or, lowest instead of highest railroad rates in the world.* (Milwaukee, Wis.; C. N. Caspar Co. 1913. Pp. 307. \$2.)
- KEILER, H. *American shipping. Its history and economic conditions.* Probleme der Weltwirtschaft, 14. (Jena: Fischer. 1913. Pp. xx, 144. 6 m.)
To be reviewed.
- KNIBBS, G. H. *Summary of Commonwealth statistics of transport and communication for the years 1902-1912.* Transport and communication bulletins, No. 6. (Melbourne. 1913. Pp. 41.)
- KNOWLAND, J. R. *Panama canal tolls. Extracts from Congressional Record and public documents.* (Washington: Isthmian Canal Commission. 1913. Pp. 134.)
- MICHON, G. *Les grandes compagnies anglaises de navigation.* (Paris: Arthur Rousseau. 1913. Pp. viii, 255.)
- MOLTMANN, B. H. *Hamburgs Schifffahrt in alter und neuer Zeit.* (Hamburg: Eckardt und Messtorff. 1913. Pp. 38. 0.75 m.)
- NIGGL, A. *Das Postrecht. Die wichtigsten Vorschriften des inländischen und des internationalen Postrechts mit Erläuterungen.* (Stuttgart: Kohlhammer. 1913. Pp. vii, 267. 4.50 m.)
- PFEIFF, E. *Die badischen Staatseisenbahnen und die Grossschifffahrt auf dem Oberrhein.* Vol. I. Grundlagen. (Karlsruhe: G. Braun. 1913. Pp. viii, 72. 2 m.)
- PRATT, E. A. *The state railway muddle in Australia.* (London: Murray. 1913. Pp. viii, 164. 2s. 6d.)
- STOCKERT, L. R. *Eisenbahnunfälle.* Two volumes. (Leipzig: Wilhelm Engelmann. 1913. Pp. vi, 274, illus. 24 m.)
- THOMPSON, S., compiler and editor. *The railway library, 1912.* (Chicago: Stromberg, Allen & Co. 1913. Pp. 470. 50c.)
This is the fourth annual volume designed to render easily accessible noteworthy contributions to railway literature. There are 26 extracts or complete papers. The most important are: "The

Opinion of Justice Hughes of the United States Supreme Court in the Minnesota Rate Cases"; "Safety First, the Slogan," by Interstate Commerce Commissioner C. C. McChord; and several articles on state ownership of railroads. Nothing favorable to or setting forth the advantages of state ownership is included. The last 180 pages are devoted to railroad statistics including figures for a number of foreign countries. The tables are valuable, but the textual analysis shows editorial bias and the conclusions reached are not always warranted by the data. Too often the underscoring of certain portions seems to call attention to statements which meet with the editor's approval rather than to indicate the really salient points in the arguments.

C. W. DOTEN.

Sayings and writings about the railways. By those who have managed them and those who have studied their problems. (New York: Railway Age Gazette. 1913. Pp. 240.)

Most of these extracts are merely short paragraphs from speeches and articles. There are 250 of them representing over 100 authors or sources. Among the topics covered are: What railroads have done and what they mean to civilization and prosperity; Who owns the railways? Wages and labor; Rates and rate-making; Regulation and legislation; Capital and credit; Government ownership and valuation. The first topic gives the keynote of the book which is extremely laudatory and favorable to everything that the railroads have done or desire to do. There is no criticism of railway management, nor is there the slightest intimation that the railway managers have been in any way responsible for what the editor in his preface calls "a new crisis" in the development of the railroads.

C. W. DOTEN.

Les ports et leur fonction économique. Vol. V. Rouen, by G. BONDEL. Montréal, by DEWAVRIN. Seattle et Tacoma, by M. RONDET-SAINT. Trieste, Fiume et Venise, by M. DEWAVRIN. Venise au moyen âge, by C. TERLINDEN. *Les ports du Nord-Est de l'Angleterre*, by J. MEUWISSEN. *Conclusions*, by G. BLONDEL. *Appendice: L'administration des ports*, by J. CHARLES. *L'industrie des transports maritimes*, by H. MANSION. (Louvain: Secrétariat de la société scientifique. 1913. Pp. 272. 3 fr.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

ADLER, F. *Die Entwicklung des deutschen Häutemarktes.* (Karlsruhe: G. Braun. 1913. Pp. viii, 181. 3.60 m.)

COUDRAY, G. and CUXAC. *Notions de commerce.* (Paris: Dunod et Pinat. 1912. Pp. 342.)

HAMMANN. *Die Handelsbeziehungen zwischen Deutschland und Kanada im Jahre 1912.* (Berlin: Springer. 1913. 1 m.)

HENNIG, R. *Probleme des Weltverkehrs.* (Berlin-Wilmersdorf: H. Paetel. 1913. 5 m.)

HIRST, F. W. *The six panics and other essays.* (London: Methuen. 1913. 5s.)

VON KRIES, W. *Seezollverwaltung und Handelsstatistik in China. Probleme der Weltwirtschaft*, 13. (Jena: Fischer. 1913. Pp. x, 110.)

SCHAUWECKER, C. *Der schweizerische Weinhandel unter dem Einflusse der gegenwärtigen Wirtschaftspolitik. Zürcher volkswirtschaftliche Studien*, 6. (Zürich: Rascher & Co. 1913. Pp. 294. 9 m.)

WEKERLE, A. *Die passive Handelsbilanz*. (Vienna: Manz. 1913. Pp. 26. 0.85 m.)

Handbook of the port of Boston, 1913. (Boston: Chamber of Commerce. 1913. Pp. 265. 50c.)

Accounting, Business Methods, Investments, and the Exchanges

The Stock Exchange from Within. By WILLIAM C. VAN ANTWERP. (New York: Doubleday, Page and Company. 1913. Pp. 459, illustrated. \$1.50.)

The Value of Organized Speculation. By HARRISON H. BRACE. Hart, Schaffner, & Marx Prize Essays, XIV. (Boston: Houghton Mifflin Company. 1913. Pp. xii, 290. \$1.50.)

Die New Yorker Fondsbörse. Ihre Geschichte, Verfassung und Wirtschaftliche Bedeutung. By KURT FREIHERR VON REIBNITZ. (Jena: Gustav Fischer. 1912. Pp. 126. 4 m.)

The Elements of Speculation. By THOMAS GIBSON. (New York: The Gibson Publishing Company. 1913. Pp. 149. \$1.00.)

Effektenbörsen. By RICHARD PASSOW. *Materialen für das Wirtschaftswissenschaftliche Studium*, Vol. II. (Leipzig: B. G. Teubner. 1912. Pp. 148. 2.50 m.)

The books by Mr. Van Antwerp and Mr. Brace are both to a certain extent the result of the renewed agitation in recent years against speculative markets and the widespread demand for their control or abolition by legislative action. Mr. Van Antwerp writes frankly with the object of answering these arguments, although he states that he is speaking purely as an individual stockholder and not as representing the authorities of the New York Stock Exchange. To his experience as a stockbroker is added an earlier experience as a journalist, which makes the book extremely readable. Naturally, both because of his own position as a member of the exchange and because of irritation with the very unjust and unintelligent criticisms which have been brought against the speculative market, his leaning is toward a minimizing of all the evils of speculation and a full presentation of its benefits. On the whole, however, he keeps a very sound balance

and the book may be heartily recommended for the soundness of its views as well as for its skill of presentation.

He has read somewhat widely both in the history of organized speculation and in the theories of economists regarding its functions, and quotes freely and pertinently from leading authorities. He scarcely attempts to elaborate an original theory of his own. The book, perhaps, would be somewhat stronger if in his earlier chapters on the function of speculation he had brought out more clearly the problem of risk in economic affairs and the way in which different risks have to be met by different methods. On the general theory, most of what he says is already familiar to those who are acquainted with the literature of the subject. His personal experience is better reflected in a chapter on cautions and precautions, in which he well points out many of the popular misunderstandings, and also in a very entertaining chapter called *The Day on 'Change*.

One might wish that from his personal experience he had discussed a little more fully the actual differences of opinion that prevail among members of the exchange as to just what kind of conduct is legitimate under their own code of ethics. He is quite justified in pointing out how much higher this code is today than it was twenty years ago and in holding that the exchange should be judged by its present standards. At the same time, there is a real difference of opinion between different elements in the exchange membership on many of these matters. One point where such difference occurs is regarding the practice of "making a market" for a new security by somewhat artificial manipulation. This is defended by some members of the exchange as a mere advertising of wares, and yet it is the present tendency of the best element in the exchange to look upon such practices with growing disfavor. The author discusses this question, but not quite so frankly or fully as interested readers would desire.

A useful chapter summarizes the history of the attempts to control speculative markets by legislation. In many ways the most valuable and original chapter of the book is that in which the author contrasts the practices of the London exchange and those of the New York Stock Exchange, in which he discusses the various points with clearness and force. His conclusion seems to be, regarding the most striking difference as to daily settlements versus fortnightly settlements, that the New York method tends to keep down extravagant speculation and to prevent insolvency,

while, on the other hand, it is largely responsible for the great fluctuations in the rates for call money. He suggests that a time may come when the New York Exchange will put in force a combination of a daily settlement of differences with a periodical delivery of stock; a suggestion of particular interest to the present reviewer since he made the same proposal nearly twenty years ago.

It may seem ungracious to criticize a minor matter in so admirable a book, but the reader is frequently surprised to see references to "Governor" White or "ex-Governor" White when the author is quoting from our oldest and best-beloved economist. To be sure another Horace White was governor of New York a few months after the resignation of Governor Hughes, but it is a somewhat discouraging commentary on fame in the field of disinterested public service that so intelligent a man as Mr. Van Antwerp should mix them up.

The book by Mr. Brace is much more difficult reading and more confused in its form of presentation. On the other hand, it is the more serious and original of the two. The first chapter or two are somewhat disappointing, dealing with the value, the history, and the features of organized speculation. It seems as if the author, by a different arrangement, could have brought out much more clearly the character of speculative transactions; and, frequently, somewhat simple matters which are quite essential to the understanding of the reader not familiar with what is being described are entirely omitted or left to be taken up later.

On the other hand, his chapters on the effect of speculation on prices and the indirect effects of speculation are original in treatment and show a great deal of careful thought. His conclusion regarding prices is that the tendency of speculation is not to lower the prices of products, as has been so commonly charged in recent attacks on the speculative markets, but rather to raise the prices of such commodities or securities as are dealt in on the organized exchanges. The reasons for this he thinks are threefold: first, the psychological fact that speculators are naturally bullish; secondly, the necessity of maintaining reserve stocks to make possible the delivery on short contracts; and, third, the interest of brokers to persuade the public that prices are going up, since an advancing market means large trading.

It is not possible to enter into an analysis of the author's contention in the limits of a brief review. The problem would have been made somewhat clearer if he had considered the difference

between producer's price and consumer's price. Unquestionably the speculative market brings these two prices nearer together and may have the effect of increasing the price to the farmer while diminishing the price to the consumer. His answer to the popular fallacy is thorough and convincing. He seems, however, to have gone somewhat too far in the opposite direction. None the less, what he has to say may be read with interest and care by the serious student of the question.

In the chapter entitled *Indirect Effects*, he challenges a theory of the present reviewer, frequently expressed and as frequently criticized, that the active participation of the outside public in the speculative market is necessary to give the market that breadth without which it cannot perform its proper function. He does this after careful thought and in the kindest manner. Although the reviewer is not convinced that his own position is incorrect, he freely recognizes the author's forceful presentation of the other view.

Dr. Von Reibnitz's study of the New York Stock Exchange does not require detailed notice. It covers little that is not perfectly familiar already to the American reader. It takes up the history of the stock exchange in relation to different panics, but makes no searching analysis. In fact, it does little more than chronicle the fluctuations of prices and the general market conditions of the time. His section on the economic service of the stock exchange to the United States adds nothing new. It is chiefly a statement of how large a part of the material wealth of the country is represented by transferable shares and the need of some market for them. In the book are to be found such exaggerated statements as that ninety per cent of all Americans speculate. His description of the organization of the New York Stock Exchange and the methods of dealing is satisfactory enough but brief.

A personal reference may perhaps be allowed. The writer of this review a few months after the panic of 1907 wrote a brief article, entitled *Some Lessons of the Panic*, for the "Yale Review." In this he enumerated a number of supposed causes to which the panic had been attributed by the yellow press, including the charge that it was purposely brought about by a few dominating financiers with the object of filling their own pockets through the general crash. This was then dismissed as being too absurd to be worthy of argument, and the real causes of the panic

were considered. Imagine his surprise on reading the following sentence on page 78 of this monograph: "Henry C. Emery, now chairman of the Tariff Board, calls their conduct a premeditated plot on the part of unscrupulous financiers to topple over the structure of credit for their own ultimate advantage." After that discovery he may perhaps be pardoned for refusing to recommend Dr. Von Reibnitz for strict accuracy.

Mr. Gibson's book is somewhat misleading in its title. In the first few pages he makes several sane remarks on the nature of speculation in general, but the bulk of the book is devoted to a consideration of the two factors which, in his opinion, are most influential in determining the course of speculative prices on the stock market. These are the condition of the crops and the condition of the money market. There is nothing very new in the discussions of either of these factors, but they contain suggestions which are interesting as coming from a veteran writer on these subjects, who is also a man of affairs. Even more interesting are the reflections of his experience in his chapters on stop-loss orders and mental characteristics. In general, he gives much sound advice to those who are inclined to tempt their fate in the speculative market, barring the advice to stay out altogether. In a chapter on the future of our railroad securities he takes a somewhat roseate view of the situation. It is rather surprising to find a writer of so much practical knowledge drawing conclusions from the fact that the average rate of interest on railroad bonds has fallen in the last twenty years. He gives the average rate for 1910 as 3.79 per cent. Prices of railroad securities for the future are not determined only by what they are now paying on money borrowed long ago, but rather by the rate they will have to pay in the future on money borrowed at the present time. The author seems to neglect this point entirely.

The little volume edited by Dr. Passow needs no comment. It is a convenient collection of documentary material for those who wish to refer first-hand to the German law regulating stock exchanges and the regulations and rules of various German exchanges themselves, including also one or two leading court decisions. The editor makes practically no comments on the material which he publishes.

H. C. EMERY.

Yale University.

Handbook of Municipal Accounting. Metz Fund Handbooks of City Business Methods. Prepared under the direction of WILLIAM H. ALLEN, HENRY BRUERE, FREDERICK A. CLEVELAND. (New York: D. Appleton and Company. 1913. Pp. xxx, 318. \$2.00.)

The publication of this book is one of the evidences of the great contribution the Bureau of Municipal Research has made not only to a knowledge of municipal conditions, but to an understanding of the way out of inefficient municipal administration. The first impression one gets of the book is surprise at the ratio between text and forms; for most earlier publications on municipal accounting have dwelt on tables and forms rather than on the principles which should underlie them. Here are 221 numbered pages, of which 207 are text. Besides the tables and forms given on the remaining 14 numbered pages, inserted leaves of forms are 34 in number. To those who believe that no accounting form exactly suitable to one circumstance is ever likely to be quite the best for any other, this seems as it should be. The authors of this book do not tell how to do things: they tell how to go to work to find how to do things. They know that rules of thumb and blind following of forms do not tend to produce good accounting, for the requisites of good work are analysis and judgment. They have accordingly shown how the universal accounting principles should be applied to municipal affairs and what municipal affairs are somewhat unique in the application of accounting principles.

In the main, the discussion of principles and their application is clear, and the forms are suggestive. Not always are the forms offered likely to serve their purpose, however, for the authors, in their desire to present figures for the layman, sometimes violate established accounting practice so much as to confuse, at least without careful study (which the forms were devised to render unnecessary), the reader familiar with accounts. This is in part due to the origination of terms that seem to the uninitiated almost purely arbitrary. Some of these are so little suggestive of their content that the reviewer, for one, has regularly since their publication in the "Journal of Accountancy," in 1910, found necessary a fresh memorizing of their significance whenever he has had occasion to interpret or use them. The system of accounting for estimated revenue, for authorizations to incur liabilities, for liabilities actually incurred, etc., is admirably worked out; but it is

unduly complicated in application by the arbitrary terminology used for designating accounts—such as “available balances” (p. 29) and “unapplied balances” (p. 30), for two accounts representing assets entirely unlike in nature. A debit to “estimated revenues” is sometimes (p. 40) a deficit, though by all the logic of terms and by definition it should be an asset (p. 40). Only a trained accountant could keep his head through these mazes. It is hoped that the plan will be simplified by its authors, for it accomplishes ideally, when consistently carried out, what is desired for watching income, appropriation, and expenditure.

A few extracts will show some of the important statements and will suggest the sanity of the book as a whole.

Comparison of costs, which is the great factor in determining and developing efficiency of administration, can be made only when the costs are reduced to a unit basis; that is, when the total cost for a period is divided by the number of units of work performed or other results (p. 6).

We therefore hold that the items in a balance sheet should be so classified that assets will be opposed by the liabilities which are to be met by them; for example, cash should be opposed by the immediate demands for cash, and uncollected taxes or other revenues receivable which may be pledged should be opposed by temporary loans made in anticipation of their collection (p. 21).

It is sometimes urged that permanent properties and bonded debt of cities should not be contrasted in balance sheet form for the reason that the former are never regarded as available for liquidating the bonded debt. . . . What is intended is to produce useful information about the results of past transactions in so far as they may affect the future. . . . Since a heritage of debt has been provided, it is but just that the heritage of useful properties acquired may also be definitely known. So far as the future taxpayer is concerned the capital account balance sheet is a summary of inventories of debts and properties inherited. . . . The property account lays the foundation for audit of sales, condemnations, demolitions, losses, and other mortality returns; it lays the foundation for actuarial data pertaining to ‘upkeep’ over a period of years; it gives a basis for establishing reserves for ‘depreciation’ (pp. 47-53).

It is regrettable that the authors contribute to the haziness regarding certain accounting terms, whereas they might help to give added definiteness. They use the term “reserve” in three senses—for surplus (p. 137), for deduction from assets (p. 56), and for liabilities (p. 66); and yet these things are wholly unlike.

Typographically the book is not pleasing, for boldface type is used in the text both for emphatic words and for names of ledger accounts. Sometimes one is puzzled to know which purpose is

served, and some pages literally bristle (pp. 68, 69). The index is remarkable—95 pages for 221 pages of text. Some long phrases are indexed under virtually each word, as “Coöperation of officials necessary for reorganization,” indexed under four heads—coöperation, financial officers, public officers, reorganization. Some mere index titles occupy three full-page lines. One topic reads, “‘Red tape’, defined”; and yet the sentence indexed does not attempt to define red tape. Most purchasers of books do not care to pay for indexing of this excessive type. The index-maker has done his best to make the book appear bromidic; but it is full of good things and suggestive.

WILLIAM MORSE COLE.

Harvard University.

Elements of Accounting, Theory and Practice. By JOSEPH J. KLEIN. (New York: D. Appleton and Company. 1913. Pp. xiv, 422.)

The author of this work is a member of the faculty of New York University School of Commerce, Accounts and Finance, and his work there, together with the assistance he has received from many whose names are familiar to the accounting profession, has enabled him to produce a text which goes far toward attaining the purpose sought, namely, “to bridge the gap between book-keeping and accounting.” Presupposing on the part of the student a knowledge of debit and credit, he first discusses the principles of bookkeeping as applied in the ordinary books of account, and then shows how, by the application of accounting principles, some of the important accounts and books may be rearranged to secure better results. Next follow three chapters on single versus double entry, partnership accounting, and corporation accounting, respectively; after which there naturally comes the preparation of final statements according to the most approved modern practice. The difficult subjects of depreciation, reserve, sinking fund, and investment accounting, which are closely associated with the proper financing of most enterprises, are treated and illustrated in such a way as to render them readily comprehensible. A section, unique in works of this character, is devoted to the accounts of non-trading concerns, following which a clear elucidation is given of the statement of affairs and deficiency account and the realization and liquidation account. The two succeeding chapters, comprising but 30 pages, on the theory of cost accounts, and the final chapter, of only 34 pages, on auditing, are

inadequate to *introduce* the student to these broad and intricate subjects. Each chapter closes with appropriate problems and a bibliography; and, in the appendixes, the large number of supplementary exercises, questions, and problems, mostly taken from C.P.A. examination papers, furnish abundant material for tests.

Each step in the work is amply exemplified by concrete problems, so that not a single point is left in the dark. This, in such a subject, is highly commendable, and is in strong contrast to the work by Racine recently noted in the *REVIEW* (vol. III, p. 658). Moreover, the discussion of important issues, while purposely definite and authoritative, is by no means dogmatic, and it is constantly reiterated that there are other solutions for problems than those given by the author. He freely allows some elasticity in the matter of the forms of record, and is just as free to acknowledge that there is no royal road by which alone correct results may be secured.

But there are some things in this notably meritorious work which call for adverse comment. The "substitution device" (p. 4) is useless or confusing. The making of only two classes of accounts, real and nominal (p. 21), is unscientific; because expense, for instance, is just as much a *thing* as merchandise, inasmuch as coal, stamps, and office stationery are as much things as are goods and notes. Again, to call merchandise account a real account, and purchases account a nominal account (pp. 24-25), is to attempt to make a difference where no difference exists, for they both represent goods; and, worse than that, to add the amount of the real account to the amount of the balance of the nominal account, so-called, would be to get something indefinite, composite, as a result. In this connection, also, is there any sense in calling merchandise inventories tangible things, while purchases and sales and return purchases and return sales of merchandise are not tangible things (p. 23)? It is of very doubtful validity to separate the trading and the administration section of the trading and profit and loss statement (pp. 171-172); for example, advertising, salaries of salesmen, and selling expenses are just as much administration expenses as are office salaries and office repairs.

To accomplish the author's purpose, students should already have a fairly good knowledge of bookkeeping before beginning this work, or else should be given more practice in modern methods of recording during their study of this text. It is as impossible to secure thorough accountants without their first having an accurate

and instantaneous knowledge as to the actual methods of keeping accounts, as it is to expect skilful engineers to result from the theoretical study of technical engineering subjects without the necessary practice in shop, factory, or field. But, all in all, this is probably the simplest and best text that has yet appeared for the purpose it is intended to serve.

W. T. JACKMAN.

University of Vermont.

Regulation, Valuation and Depreciation of Public Utilities. By SAMUEL S. WYER. (Columbus, O.: The Sears and Simpson Company. 1913. Pp. 313. \$5.00.)

Engineering Valuation of Public Utilities and Factories. By HORATIO A. FOSTER. (New York: D. Van Nostrand Company. 1912. Pp. xvi, 345. \$3.00.)

Mr. Wyer offers his book as an "unbiased discussion and concise compilation of the pertinent economic, engineering and legal facts" pertaining to public utilities. With the exception of the first two chapters dealing with introductory matters and definitions, and chapters 14, 15, and 16, presenting respectively technical engineering data, reference tables, and a selected bibliography, the volume is devoted to three general subjects: (1) the economics of public utilities, describing the nature of the different services, especially in reference to costs, prices, and rates, (2) the principles underlying the regulation of public utilities, and (3) the valuation of utility properties, especially for rate-making purposes. Much of the subject-matter in all the chapters is technical. The book is perhaps more a "compilation" than a "discussion," presenting almost throughout *facts* merely as such, with little regard to their interrelation and their economic significance. The chapters on regulation and valuation consist largely of concise and pointed citations from court decisions. In a few instances the *facts* appear more absolute than they actually are. Citations from federal and state courts, and even from state commissions, are used to present general principles. This cannot be done safely unless the views presented have been specifically affirmed by the Supreme Court of the United States. Thus the view in paragraph 289 (p. 95), that the states may not substantially burden interstate commerce (taken from *Shepard v. N.P. Ry. Co.*, 184 Fed. 775), was definitely overruled in June, 1913, by the decision of the Supreme Court in the Minnesota rate cases. Again, it is extremely doubt-

ful whether the principle followed by the Wisconsin Railroad Commission would be supported by the Supreme Court, namely, that "going value must be considered in fixing rates" and that "going value may be capitalized" (p. 179). For the most part, however, the volume has been carefully and well prepared and serves its purpose excellently—as a handbook of useful information, not an economic treatise.

Mr. Foster is an engineer with considerable practical experience in valuing public service and factory properties. He has attempted in his book a twofold task: (1) to explain the principles that are and should be followed in the valuation of properties, especially for rate-making purposes, and (2) to outline forms and procedure in an actual valuation. He has succeeded far better in the second; and chapters three, four and five, dealing with those matters, will be useful to any one interested in the practical aspects of an appraisal. The forms are taken principally from the joint engineering department of the Wisconsin Tax and Railroad Commissions, and they cover more especially railroad, street railway, telegraph and telephone, water works, gas and power properties. The book consists of fifteen chapters, an introduction, a selected bibliography, and an index.

Mr. Foster upholds the doctrine that a valuation for rate-making purposes should equal the cost of reproduction new at the time of the appraisal, less depreciation to cover the wear and tear of the existing property, plus going value. The last represents an allowance made for the difference between the mere existence of physical plant and such plant in actual operation, with the established reputation and connections of the property that is being valued. The author apparently favors the rule of the Wisconsin Railroad Commission, that "the actually reasonably wise expenditure of money towards getting the business of the plant established may be included in the value to be allowed for the purpose of fixing rates" (p. 142). This view has been followed more or less definitely by several federal and state courts, and Mr. Foster seems to present it as a generally accepted doctrine in the regulation of American utilities. While state commissions undoubtedly may follow this rule if they wish, they probably are not under constitutional obligation to do so. The matter has never been specifically determined by the Supreme Court of the United States. However, in the recent Minnesota rate cases, while the cost-of-reproduction principle was apparently approved,

the court refused to allow certain special additions, which were not much unlike the idea of going value.

Mr. Foster's book should prove fairly useful to anyone reasonably familiar with public service matters: it teems with quotations from well-known writers, court decisions, and reports of commissions, and so offers a multitude of good suggestions. But, to laymen, especially to engineers not trained in economics, it would probably serve more to confuse than to enlighten. The point of view is often unclear, and the subject-matter is ill-digested. There is little logical sequence either in the order of chapters or in the passage from one idea to another. Chapter lengths vary from such extremes as a single page, two, four, and five pages to seventy-two and ninety pages. Quotations are not only too numerous and long, but their purpose is often obscure and in a number of cases they are needlessly repeated. The author delights in definitions, but is not very fortunate in making them lead anywhere.

JOHN BAUER.

Cornell University.

A Short History of Accountants and Accountancy. By ARTHUR H. WOOLF. (London: Gee and Company, Ltd. 1912. Pp. xxxi, 254. 7s. 6d.; New York: The Ronald Press Company. 1912. \$2.75.)

This is a revision of a series of articles first published in "The Accountant." The general title differs only slightly from that adopted by R. Brown, the editor of a similar series of essays by prominent Scottish and English accountants. Further comparison shows that Woolf's work is not unlike Brown's in chapter titles and in the arrangement of material. There are other analogies.

On the other hand, Woolf's work has been independent of any one authority. It relies largely upon secondary authorities, to be sure, but these include a large number of English, Italian, and French writers, and they have been used discriminately. Brown is frequently cited, as is also Sieveking, the standard German authority, but neither has been unduly relied upon. The work is therefore essentially Woolf's own, and represents a distinct contribution to the literature of economic history and of accounting (we can hardly say of "accountics," although Woolf supposes this to be an American expression).

As might be expected, the information respecting accounting in

antiquity is fragmentary. For Egypt, our knowledge relates to the activities of the scribes of crown lands and the scribes of royal revenues. For Babylonia, also, we have a description of the fiscal organization, and, in addition, certain commercial transactions are described. For Greece, the description is amplified by a relation of the duties and activities of the farmers of revenue, of the government auditors, and of the bankers. For Rome, we have, in addition, the household expense books which are especially significant in the history of accounts, since, although incomplete, they begin to look like our account books.

For the so-called Dark Ages, the church furnishes the most characteristic accounts. Woolf also gives us a description of Charlemagne's *Capitulaire de Villis*, but here he is disappointingly brief. A chapter of a dozen pages is devoted to the English exchequer; this is followed by one on accounting in England from the eleventh to the fifteenth century, which includes brief descriptions of the Domesday Book, the Hundred Rolls, the Wardrobe accounts, manorial accounts, and those of religious houses, private households, and livery companies. In the next chapter, dealing with the corresponding period on the continent, we find the first trace of merchants' account books.

Part II treats of the growth of the science of bookkeeping. Its most interesting chapter is that describing the work of Paciolo. Part III consists of a single chapter sketching the history of auditing, but not embracing modern auditing. Part IV has a chapter on early accountants in Italy, and three on accountants in Great Britain.

Notwithstanding the work of Sieveking and that of Brown and his associates, there is still room for the book under review, which hardly alters the situation. We still need a more thorough, more complete, and more technical history of accounting; in other words, we need a work which is frankly and successfully ambitious. Woolf's book is not ambitious. As a brief sketch it is admirable. It is trustworthy and it is interesting.

A general thesis frequently maintained in the book is that accountancy is a mirror which accurately measures "the stage of culture and development attained by a community." Such generalization is fascinating. Better still, the suggestion is worth careful consideration. If true, it adds immensely to the significance of accounting in the study of economic history. The reviewer fears, however, that the statement is true only with numerous and important qualifications.

One of the most useful features of the volume is the bibliography prepared by Cosmo Gordon, librarian of the Institute of Chartered Accountants in England and Wales. It is compiled from books in the library of the Institute, supplemented by entries from Brown, Eldridge, Reymondin, and other bibliographical sources. The titles are arranged chronologically, beginning with the work of Paciolo (1494), and extending to the year 1800.

WILLIAM H. PRICE.

Imperial University of Tokyo.

NEW BOOKS

BEHM, P. *Der Handelsagent. Seine soziale Stellung und volkswirtschaftliche Bedeutung.* (Berlin: Siemenroth. 1913. Pp. ix, 202. 5 m.)

BEXELL, J. A. and NICHOLS, F. G. *Principles of bookkeeping and farm accounts.* (New York: American Book Co. 1913. Pp. 184. 65c.)

BIVINS, F. J. *The farmer's political economy. "The dead horse in our spring ranch." Farmer Dan Luke's exposure of cotton marketing.* (Macon, Ga.: Randall Prtg. Co. 1913. Pp. 89. \$1.)

BRANDE, J. *Die Vereinigung der Berliner Mitglieder des Börsenvereins 1888-1913.* (Berlin: R. L. Prager. 1913. Pp. viii, 144. 3 m.)

BRISCO, N. A. *Economics of business.* (New York: Macmillan. 1913. Pp. xiv, 390. \$1.50.)

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CROAD, H. J. *Bond values according to the life insurance law of Massachusetts.* (New York: Spectator Co. 1912. \$7.50.)

GERSON, O. *Organisation, Statistik und systematische Kontrolle in kaufmännischen Betrieben.* (Hamburg: P. Babst. 1913. Pp. viii, 195. 8.50 m.)

HAWKINS, R. H. *Notes on real estate in western Pennsylvania.* (Toledo, O.: Toledo Legal News Co. 1913. Pp. 200.)

HEYLIN, H. B. *Buyers and sellers in the cotton trade.* (Philadelphia: Lippincott. 1913. Pp. 234. \$3.)

JOHNSON, G. *Manufacturing book-keeping and costs.* (London: Pitman. 1913. Pp. 124. 3s. 6d.)

KOESTER, F. *The price of inefficiency.* (New York: Sturgis & Walton. 1913. \$2.)

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LUCE. *Fonds und Effekten der Bremer Börse.* (Bremen: Bremer Zeitungs-Gesellschaft. 1913. 3.75 m.)

MACFARLAND, G. A. and ROSSHEIM, I. D. *A first year in bookkeeping*

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- MARDEN, O. S. *Training for efficiency.* (New York: T. Y. Crowell Co. 1913. Pp. ix, 360. \$1.25.)
- PEREIRE, G. *Essai sur une comptabilité des chemins de fer.* (Paris: Alcan. 1913. 1 fr.)
- POWERS, O. M. *Theory of bookkeeping.* (Chicago: Metropolitan Text-Book Co. 1913. Pp. 125. \$1.50.)
- REDFIELD, W. C. *Business in the public mind.* Sen. Doc. 37, 63 Cong., 1 Sess. (Washington: Gov. Pr. Off. 1913. Pp. 10.)
- RICE, G. G. *My adventures with your money.* (Boston: R. G. Badger. 1913. Pp. 363. \$1.50.)
- RICHARDSON, A. P., editor. *The influence of accountants' certificates on commercial credit.* (New York: Am. Assoc. Pub. Accountants. 1913. Pp. 9, 99. 50c.)
- THORNTON, F. W. *Brewery accounts.* (New York: Ronald Press Co. 1913. Pp. x, 102. \$2.)
- TOVEY, P., editor. *Pitman's dictionary of secretarial law and practice.* (New York: Pitman. 1913. Pp. 15, 757. \$10.)
- WILLISTON, S. *Lectures on commercial law and the law of negotiable instruments.* (Boston: Wright & Potter. 1913. Pp. 250. \$5.)
- WINCHELL, S. D. *The model system of bookkeeping and cost finding, prepared especially for the printing and allied industries.* (Philadelphia: T. A. Winchell. 1913. \$10.)
- WOOLF, A. H. *The stock exchange, past and present.* (London: Accountant. 1913. Pp. ix, 125. 2s. 6d.)
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- Analyses of the railroad corporations whose bonds are a legal investment for Massachusetts savings banks.* (Boston: Old Colony Trust Co. 1913. Pp. 707.)
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- The land-title registration act of the state of New York.* (Buffalo, N. Y.: Otto Ulbrich Co. 1913. Pp. 72. 50c.)
- Uniform system of accounting for cities of the second class.* (Albany, N. Y.: Comptroller's Office. 1912. Pp. 116.)

Capital and Capitalistic Organization

NEW BOOKS

- EBNER, G. *Die Kartellgeschichte der deutschen Röhrenindustrie.* (Berlin: Deutscher Montan-Bund. 1 m.)
- FLECHTHEIM, J. *Deutsches Kartellrecht.* Vol. I. *Die rechtliche Organisation der Kartelle.* (Mannheim: Bensheimer. 1913. Pp. vi, 214. 5 m.)
- FAS, E. *Die Berücksichtigung der Wertverminderungen des stehenden*

Kapitals in den Jahresbilanzen der Erwerbswirtschaften. (Tübingen: H. Laupp. 1913. Pp. vii, 132. 4 m.)

GOERRIG, R. *Der Tabaktrust und seine Gefahren für Deutschland.* (Dresden: F. C. Boden. 1913. Pp. 88. 0.20 m.)

HANEY, L. H. *Business organization and combination.* (New York: Macmillan. 1913. Pp. 483. \$2.)

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LIEFMANN, R. *Beteiligungs- und Finanzierungsgesellschaften. Eine Studie über den modernen Kapitalismus und das Effektenwesen in Deutschland, den Vereinigten Staaten, der Schweiz, England, Frankreich, und Belgien.* Second edition, enlarged. (Jena: Fischer. 1913. Pp. xiv, 626. 16 m.)

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PEYROUTEN. *Les monopoles en Indo-Chine.* (Paris: E. Larose. 1913. 4 fr.)

POND, O. L. *A treatise on the law of public utilities operating in cities and towns.* (Indianapolis: Bobbs-Merrill Co. 1913. Pp. liv, 954.)

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RAMORINO, A. *La borsa: sua origine, suo funzionamento.* (Bari: G. Laterza e figli. 1912. Pp. 98. 2 l.)

SINGER, J. *Das Land der Monopole: Amerika oder Deutschland.* (Berlin: Siemenroth. 1913. 8 m.)

YOUNG, E. H. *Foreign companies and other corporations.* (New York: Putnam. 1912. Pp. 332. \$4.)

The land hunger: life under monopoly. With an introduction by MRS. COBDEN UNWIN and an essay by BROUGHAM VILLIERS. (London: Unwin. 1913. Pp. 234. 2s.)

The United Railways and Electric Company of Baltimore; history and description of property and securities. (Baltimore, Md.: A. Brown & Sons. 1913. Pp. 38.)

Labor and Labor Organizations

American Syndicalism. The I.W.W. By JOHN GRAHAM BROOKS. (New York: The Macmillan Company. 1913. Pp. 264. \$1.50.)

This is a book for the open-minded citizen rather than for the

special student of organized labor. It is not a systematic, technological study of syndicalism and the I.W.W., but rather an attempt to show the general characteristics and the social significance of the syndicalistic movement and to indicate the attitude which society ought to take toward it.

Syndicalism, in the view of the author, is a general attitude, tending to manifest itself functionally and organically wherever workers have been denied or have lost faith in the more usual methods by which redress and betterment are sought by them. The deepest causes of it are economic, but its most obvious and proximate origin lies in frustrated hopes. It is immediately the outgrowth of the rage engendered by disappointment in the results of reform, trade unionism, and socialism. Practically it is destructive and anarchistic. Whatever constructive theory it voices is utopian. Its methods and ideals are, therefore, socially false and ineffective, for only by the constructive coöperation of social groups can we hope for general and permanent betterment. Nevertheless, it is not for us to condemn and ignore syndicalism. It exists because of certain things intolerable in our present system, and until these are cured we shall never stop or lessen its force. Moreover, it is not an unmixed evil: "There is much in its motive to command our respect"; it is a useful instrument in rousing sluggish social intelligence and conscience, and it has possibilities of constructive development. If, under these circumstances, "we are to create a saving statesmanship, it must have first of all the courage of open-mindedness willing to listen even to the I.W.W.; to know their leaders; yes, even to work with them rather than contemptuously and excludingly to work against them."

The whole book breathes a spirit of toleration and broad social sympathy without becoming mawkish or giving countenance to the class hatred and violent and destructive tactics of the syndicalists, but it voices unequivocally the sentiment that, if we are to escape the growth of these ideas and tactics, capital must be made to forego its autocratic exclusiveness and prerogatives, and labor must be allowed to share in the management of industry. Industrial peace and social welfare are to be purchased only by progressive inauguration of a coöperative régime. There must be "the open, declared purpose to admit labor to management, first at safe and possible points with all that this means of banished secrets; to admit it fearlessly and with no reserves as far as labor

proves its fitness; we then and there connect ourselves with the coöperative régime."

This general argument runs through the nineteen chapters of the book. The first five are devoted to the establishment of the author's general viewpoint; the next eleven to the general characteristics, various activities and proposals of syndicalism considered in this light; the final three, to the social function of syndicalism and to our own social duties in regard to it.

In a book of this kind, written primarily to establish a social viewpoint and to point a social moral in connection with syndicalism, the technical student of the I.W.W. will find much to criticise. He will object to the off-hand, unproved identification of I.W.W.-ism with syndicalism: he will hesitate to accept the idea that "syndicalism was a propelling force in the meteoric career of the Knights of Labor"; he will be disappointed with the meager, unsystematic, and perhaps at times, erroneous, treatment of the genesis and specific character of the I.W.W.; he will probably reject the general method of the whole book where the matter of fact statements are used mainly for illustrative purposes or as texts for general social speculation. Nevertheless, even the technical student cannot doubt the author's remarkable grasp of the essential character, spirit, and tendencies of I.W.W.-ism and the general labor and socialistic movement with which it is bound up. Mr. Brooks has produced a volume which the intelligent student of labor problems will read through with increasing interest and respect.

R. F. HOXIE.

University of Chicago.

The Minimum Wage and Syndicalism. By JAMES BOYLE. (Cincinnati: Stewart and Kidd Company. 1913. Pp. 136. \$1.00.)

In this "independent survey of the two latest movements affecting American labor," no attempt is made to consider the two movements in connection with each other. The body of the text is a reprint of articles which appeared in successive weekly issues of the "Cincinnati Enquirer" from February 9 to April 16, 1913. A large portion (85 pages) is devoted to a discussion of the minimum wage. The author passes in brief review the experiments of New Zealand, Australia, and England, and sketches the beginning of the movement in the United States. He is familiar with the best authorities on the subject, but gives no evidence of having made

any original investigations. He reproduces the opinions of various students of the question, such as Professors Seager and Holcombe, Beatrice and Sidney Webb, Dr. Clark, and others, but arrives at no other conclusion of his own on this "serious and complicated problem" except that for the present a "Scotch verdict" is all that can be given.

Mr. Boyle, though favorably disposed towards reform, is evidently in fear that the minimum wage is the first step on the road to state socialism which may lead further to full collectivism. After that Mr. Boyle sees terrifying visions—"the deluge!—socially, politically, and economically" (p. 84). No wonder that if Mr. Boyle is terror stricken by socialism, he can find no words strong enough to express his horror of syndicalism. In fact, what can be expected of a movement which is not "indorsed by a single recognized authority on politics or economics"? Evidently, it is but a "hysterical phenomenon, something similar to the outbreaks of the militant branch of the British suffragettes"—and what can be worse than that?

In contrast with the interpretation of syndicalism, Mr. Boyle's description of its main ideas is accurate and well worded. In a very few pages he has succeeded in presenting a very good succinct statement of syndicalist principles and of the points of difference between syndicalism and socialism. Points 8 and 9 on page 91, however, should have been made clearer. The reader is at a loss to say whether the syndicalists want each industrial group to possess the means of production or simply to use them under the control of society. The wording of point 8 expressly affirms the former; point 9 implies the latter statement. As many writers have been misled, it may be well to repeat here that the fundamental idea of syndicalism is the social ownership of the means of production; the labor unions are conceived in the future as managers and directors of industry.

LOUIS LEVINE.

History of Work Accident Indemnity in Iowa. By E. H. DOWNEY. Iowa Economic History Series. (Iowa City: The State Historical Society of Iowa. 1912. Pp. xiii, 337.)

Dr. Downey has presented his material as follows: The need of indemnity, genesis of employers' liability, analysis of the same, its practical working, accident indemnity abroad, indemnity legislation in the United States, the Iowa Employers' Liability Commission, and some standards of indemnity legislation. The book

is rather inappropriately named, for it neither confines itself to Iowa nor is it sufficiently extended to be a history of indemnity elsewhere. It might well be characterized as a sane, broadminded, progressive treatise intended to influence and to guide compensation legislation. As such a treatise it is a successful piece of work. The book, however, shows some gaps and lapses. The author is unduly pessimistic about the future number of accidents, when he declares that even in Germany work accidents are increasing both absolutely and relatively as industrial development goes forward (p. 3). His own authority (*Bulletin of the Bureau of Labor*, No. 92) makes it clear (p. 15) that the apparent increase is accounted for by statistical changes. It is, furthermore, well known that the safety movement in this country is showing marked results.

A few additional points against liability might well have been brought out by a treatment of the cost to the employer of claims paid as a matter of humanity or to keep the good will of labor, or of the consumer; the payments extorted by blackmail or through perjury; the distinct moral advantages of compensation, and the great social interest in compensation as a substitute for liability. In taking a positive stand for compulsory compensation, Dr. Downey fails to accord Minnesota its due praise for this principle, which has been referred to as "the Minnesota idea" and much urged by Hon. H. V. Mercer. By a law of 1910, New York put the burden of proving contributory negligence on the defendant employer (*Bulletin of the Bureau of Labor*, No. 91, p. 1092, sec. 202-209); consequently this idea of reversal of the burden of proof could not have originated with the Iowa commission (*Laws, 1911*), as stated by Dr. Downey (p. 171). The author might be criticised for failing in his condemnation of British compensation to praise the Britains for their provision for occupational diseases. No enthusiast for the civilized principle of compensation should forego an opportunity to declare the diseases of industry to be in the same class with the accidents. The industrial disease is simply the industrial accident in smaller, successive doses.

The author declares for exclusion of all remedies other than compensation, except where the employer has violated a safety law (p. 172). He stands for state insurance or for employers' mutual associations (p. 168). Here he is not convincing in asserting that through such insurance the cost of compensation can be more easily and certainly shifted to the consumer. Further-

more, it must be conceded that liability companies may possibly be brought so strictly under state regulation as both to afford reasonable cost for insurance and to effect reductions in accidents. It may be questioned, too, whether a free choice of physicians by workers would lead to quackery (p. 187). The author makes a good point for his favored plans of insurance by suggesting the economy of such plans and their advantage in allowing assessment insurance. Contributions by workers are condemned, but the advantages of the German system are praised. The book likewise condemns the maximum weekly limit and the time limit of so many weeks or years in paying benefits (pp. 187 ff.). Dr. Downey deals effectively with the time-worn fear of interstate competition (p. 190).

Wisconsin is deservedly praised for its administrative board legislation, but its plan borrowed from Germany of tripartite cooperation among state, employers, and workers, indispensable to successful drafting and administering of labor laws, is not sufficiently emphasized; nor is Minnesota given its due share of praise for the large part that it has played in the compensation movement through the compensation work started in the Minnesota Bar Association in 1908 by Hon. Pierce Butler, through Governor Johnson's commission, and through the agitation of Hon. W. E. McEwen and the Minnesota State Federation of Labor.

Limitations of space forbid discussion of Dr. Downey's plan for a commission representing labor, capital, and the law.

RAYMOND V. PHELAN.

University of Minnesota.

NEW BOOKS

ARNDT, P. *Die Heimarbeit im rhein-mainischen Wirtschaftsgebiet.* Vol. III, Part I. (Jena: Fischer. 1913. Pp. 260. 4.20 m.)

BERNHARD, E. *Die Vergebung der öffentlichen Arbeiten in Deutschland im Kampf gegen die Arbeitslosigkeit.* Schriften der deutschen Gesellschaft zur Bekämpfung der Arbeitslosigkeit, 1. (Berlin: Heymann. 1913. Pp. vii, 55. 2 m.)

BOYLE, J. *The minimum wage and syndicalism.* (Cincinnati, O.: Stewart & Kidd Co. 1913. Pp. 136. \$1.)

COHEN, H. *Trade union law.* Third edition. (London: Stevens & Haynes. 1913. 7s. 6d.)

DEWAVRIN, M. and LECARPENTIER, G. *La protection légale des travailleurs aux Etats-Unis, avec exposé comparatif de la législation française.* (Paris: Rivière. 1913. Pp. 348. 3 fr.)

ECKARDT, P. *Abriss der Weltwirtschaftskunde*. (Bielefeld: Velhagen und Klasing. 1913. Pp. x, 140, illus. 2.80 m.)

FULLER, H. B. *The law of accident and employers' liability insurance*. (Kansas City, Mo.: Vernon Law Book Co. 1913. Pp. xii, 503, 22, 88. \$5.)

GROSSIER, A. *La convention collective du travail*. (Paris: Dunod & Pinat. 1913. Pp. 406. 5.50 fr.)

LABATT, C. B. *Commentaries on the law of master and servant, including the modern laws on workmen's compensation, arbitration, employers' liability, etc.* Five volumes. Second edition. (Rochester, N. Y.: Lawyers Coöperative Pub. Co. 1913.)

LEWIN, D. *Der Arbeitslohn und die soziale Entwicklung*. (Berlin: Springer. 1913. Pp. vii, 206. 4 m.)

MALEGUE, J. *Une forme spéciale de chômage. Le travail casuel dans les ports anglais*. (Paris: A. Rousseau. 1913. Pp. 320. 8 fr.)

MITCHELL, J. *The wage earner and his problems*. (Washington: P. S. Ridsdale. 1913. Pp. 186. \$1.)

POUGET, E. *Sabotage*. Translated from the French with an introduction by ARTURO GIOVANNITTI. (Chicago: Kerr. 1913. Pp. 108. 50c.)

The national convention of the Socialist party of America in 1912 resolved to expel any member who advocated sabotage. A number of socialists were opposed to this pronouncement and the struggle between the defenders and the opponents of sabotage has furnished the occasion for the publication of this translation of Pouget's well-known defense of sabotage. The booklet is addressed to the workers already in sympathy with syndicalism and is designed to allay any qualms which they may have in the employment of sabotage, as well as to furnish examples of its successful use which may prove stimulating to the ingenuity of the reader.

G. E. B.

RAMBOUSEK, J. *Industrial poisoning from fumes, gases and poisons of manufacturing processes*. Translated and edited by T. M. LEGGE. (New York: Longmans. 1913. Pp. xiv, 360. \$3.50.)

REICHESBERG, N. *Der internationale Arbeiterschutts in den letzten 12 Jahren*. (Bern: M. Drechsel. 1913. Pp. 58. 1.80 m.)

ROBINSON, M. F. *Trade and labour association. The spirit of association. Being some account of the guilds, friendly societies, coöperative movement, and trade unions of Great Britain*. (London: Murray. 1913. Pp. xii, 403. 6s.)

ROWNTREE, B. S. and RENDALL, M. *How the labourer lives. A study of the rural labour problem*. (London: Nelson. 1913. Pp. 342. 2s.)

SANDFORD, T. J. *The laborers' catechism, the open road to the new Utopia*. (St. Paul, Minn.: Society of the True Republic. 1913. Pp. 140, illus. 50c.)

SCHMIT, E. *Organisation des bureaux de placement municipaux et situation des ouvriers agricoles étrangers en Allemagne.* (Paris: A. Rousseau. 1913. 5.50 fr.)

STOWELL, C. J. *Studies in trade unionism in the custom tailoring trade.* Thesis submitted in partial fulfillment of the requirements for the degree of master of arts in economics, University of Illinois. (Bloomington, Ill.: Journeymen Tailors' Union of America. 1913. Pp. 166.)

In his preface Mr. Stowell says, "The paper here submitted is intended to form the basis for a more extended study of trade unionism in the custom tailoring trade. . . . The writer was employed in the general office of the Journeymen Tailors' Union of America from 1902 to 1911 and has had opportunity to study the organization and policies of the union."

The early history of the clothing industry is traced rapidly. There was a tailor with the first Jamestown expedition in 1607; the greatest development in the ready-made industry has taken place since the revolutionary invention of the sewing machine in 1846; by 1865 the custom trade assumed much of its present form. In the description of methods of production the author sketches briefly the problems of home work and private shops, and concludes that "practically all of the evils of 'seasonal' trades are rampant in this one; long hours and crowded work in some periods, and in other periods virtually none. The number of hours that a tailor will put in during the rush season is limited only by his endurance. Twenty-four hours on a stretch is not unknown, and twelve to eighteen hours is very common." And all of this when "custom tailoring of the better grade is distinctly a luxury."

Brief mention only is made of early strikes and conspiracy trials and of The Journeymen Tailors' National Trades Union which was a considerable factor in the movement during the twelve years, 1865-1877. Only one page is given to "The Tailors" and the Knights of Labor. The remainder of the volume is devoted to the statistics of the Journeymen Tailors' Union of America, 1883-1911, with special tables on strikes and wages. The chronological history of the present organization is not sketched beyond the year 1887.

JOHN B. ANDREWS.

VAN SCHAACK, D., editor. *Safeguards for the prevention of industrial accidents.* (Hartford: Aetna Life Ins. Co. 1913. Pp. 187. 50c.)

ZITZLAFF, J. *Arbeitsgliederung in Maschinenbau-Unternehmungen.* Sammlung nationalökonomischer und statistischer Abhandlungen des staatswissenschaftlichen Seminars zu Halle, 69. (Jena: Fischer. 1913. Pp. v, 58. 2 m.)

Industrial agreements enquiry. Report of the Industrial Council, 6952. Evidence, 6953. (London: King. 1913. 3d.; 5s. 4d.)

Labour and industry in 1913. (London: J. Murray. 1913. Pp. 102. 1s.)

————— *Enquête sur le travail à domicile dans l'industrie de la fleur artificielle.* (Paris: Berger-Levrault. 1918. Pp. xi, 426. 8.90 fr.)

————— *La réglementation du travail dans les usines à marche continue. Rapport de F. Fagnot à l'association française pour la protection légale des travailleurs.* (Paris: Alcan. 1918. Pp. 121. 1.50 fr.)

Die Gewerkschaften im Lichte der Volkswirtschaftslehre. (Cöln: Christl. Gewerkschafts-Verlag. 1918. 0.30 m.)

Money, Prices, Credit, and Banking

Money-Changing. An Introduction to Foreign Exchange. By HARTLEY WITHERS. (New York: E. P. Dutton and Company. 1913. Pp. viii, 183. \$1.75.)

Mr. Withers is already familiar to us as the author of the popular but valuable essays on London finance known as the *Meaning of Money* and *Stocks and Shares*. *Money-Changing*, which attacks the somewhat more technical subject of the foreign exchanges, is the outgrowth of a series of lectures on exchange delivered before the Institute of Bankers (an English organization). It is characterized by that lightness of touch and fluency of style shown by the author in his earlier works on topics usually regarded as dry. Says the author himself, "it was a proud moment in my life when, in lecturing on foreign exchange, I was rewarded with hearty laughter from my audience, and I mention the fact as an encouragement to any reader who may be shivering on the brink of this treatise" (p. 1). An acceptable amount of jocular comment is sprinkled through the text. "Miss Potter of Texas" marries a duke and her fortune is transplanted to England. One will hardly object, I suppose, to the slight stretching of terms involved in Mr. Withers' explaining the influence of this operation on the exchanges, as an instance where England makes an export—namely, an export of social position (p. 137). Nor will any of us in America quarrel with the illustration in which a sterling bill drawn in France against a shipment of champagne is supposed to be used to discharge a debt to an English exporter of rhubarb, partly because it is probable anyway that much champagne is made out of English rhubarb (p. 94).

Money-Changing is of approximately the same length and general scope as Mr. Franklin Escher's *Elements of Foreign Exchange* and Mr. George Clare's *A B C of the Foreign Exchanges*, though all three of these differ to a degree with respect to the subject-matter chosen for emphasis and elaboration. While

Money-Changing is a well-executed and entirely praiseworthy effort to give the exchanges a popular and not over-lengthy explanation, it seems to the reviewer its claims to the first attention of the student are not quite so good as those of the books of Clare and Escher. It is, however, assuredly a welcome member to the family of exchange "elements." Mr. Anthony Margraff's *International Exchange* contains much more information on banking forms and procedure than any of the three books mentioned, but is distinctly inferior to any one of them in its exposition of the exchanges as a general system and in its style.

The reviewer does not find matters of consequence in *Money-Changing* which call for extended criticism. A classification of monetary systems is offered which makes the English the only true-blue and copper-riveted gold standard. The next best are "so-called gold standards" under which credit is convertible into gold only part of the time and then when the great banks permit it (p. 13). It is affirmed a number of times with emphasis that London possesses the only real free market for gold (as on pp. 37-9 and 171-4). Stress is also laid on the fact neglected by "theoretical students" that because banks often ship gold without regard to the immediate factors of costs and profits the exchanges may readily go beyond the gold point, when they are favorable to London, without causing shipment of specie to that center; and may occasion export of specie from London before they reach the opposite gold point, when they are unfavorable to London. There is an able and interesting discussion of finance bills and of the influences which impose limits upon their creation.

A. C. WHITAKER.

Stanford University.

Indian Currency and Finance. By JOHN MAYNARD KEYNES.
(London: Macmillan and Company. 1913. Pp. vii, 259.
6s.)

The appearance of this book is of unusual interest and importance, not only because of the author's detailed knowledge of Indian finance, but also because it sets forth the views of one who has recently been offered a seat on the Royal Commission (1913) on Indian Finance and Currency. The author first endeavors to dispel the illusion that the use of gold as a medium of exchange is a necessary complement of a gold standard. Attention is called to the growing tendency of European state banks to hold large portions of their resources abroad in foreign bills and credits, which

can be utilized for the purpose of making foreign payments, whenever a drain upon their gold supply is threatened. The gold-exchange standard is only a perfected form of the system toward which gold standard currencies have been evolving, and as such the Indian system is not an anomaly, but represents an advance stage of monetary progress. The increased circulation of gold in India would be open to objection on three counts. First, it would involve the substitution of relatively dear gold coins for overvalued silver rupees. Second, since rupees must continue to circulate widely, the scattering of the gold resources over the country, instead of their concentration in the reserves, would weaken rather than strengthen the government's power to maintain a parity of the rupee with gold in a period of falling exchange. In the third place, the tendency for gold to supplant currency notes would be increased, causing a decentralization of the reserves and a decrease in the circulation of the only element by which India can hope to secure the necessary degree of elasticity in its currency system. The author next endeavors to disprove the oft-made assertion that the volume of the Indian currency depends upon the amount of council bills which the India Office may choose to offer for sale. "Exceptional amounts of Council Bills are only sold when exchange has reached a point at which it is nearly as profitable to remit gold," while if the tender of bills is small relative to the demand, gold is exported to India.

If the foregoing views command assent, their acceptance must involve the conclusion that a policy should be adopted according to which shipments of gold to India would be discouraged. Such a result could be obtained by the issuance of a notification by the Secretary of State, declaring his willingness to sell council bills in unlimited amounts at a rate within the gold point—say, 1s. 4-1/16d. For the purpose of supporting exchange, as well as for purchasing silver for coinage, gold is as useful in London as in India; hence, the bringing of gold to India and then shipping it back to England involves a sheer economic loss. Notwithstanding Keynes' conclusion that a portion of the Indian supply of gold can be got at by the London market, whether it is "held in London or in India, by perfectly legitimate means," he suggests that, in order to relieve the suspicion which is attached to the holding of the government's gold resources in London, it might be desirable as a compromise measure to hold the gold in the currency reserve in India. Is not this an unnecessary concession

to prejudice? Any system wherein gold does not circulate freely in India is bound to meet with much ill-founded criticism in any case, and the government's intention to afford all legitimate relief to the Indian market can be displayed in some such manner as the author himself suggests in chapter 8. And the government's final answer to its critics must be the efficiency of its system in preventing wide fluctuations in exchange. If a further notification should be issued, according to which sterling drafts on London could at all times be obtained at a rate of 1s. 3-29/32d. per rupee, the limits within which exchange could fluctuate would be defined by a clear-cut governmental guarantee. Would not such a course be efficacious in disproving the widely prevalent belief that the rates of Indian exchange are in large measure regulated by governmental action? Hence, the reviewer believes that the reasons for perfecting the machinery of the exchange standard outweigh decidedly any which may be advanced in favor of sacrificing efficiency and economy to political expediency.

The author looks upon the high rate of bank discount prevailing in India in the busy seasons as due largely to the fact that the volume of the currency can be temporarily increased only by securing funds from abroad. As corrective measures he urges: first, a change in the composition of the investment portion of the paper currency reserve; and, second, the institution of suitable machinery for utilizing the funds in the cash balances and the currency reserve, in order that means may be found for affording relief to the Indian money market in periods of heavy pressure. Little aid, however, could ordinarily be obtained from the cash balances; hence the desirability that they should be held as largely as possible in the form of notes, in order that the capacity of the paper currency reserve may be increased. It is in the more extensive use of paper, rather than of gold, that the Indian currency system may best adapt itself to the particular financial needs of the country.

This conclusion, which is the author's main theme, is established in a convincing manner. The book, unfortunately, was published without the inclusion of several projected chapters, but as it is, it is a valuable contribution to a subject concerning which we may shortly hear of further developments.

HAROLD L. REED.

Ithaca, N. Y.

Seventeen Talks on the Banking Question. By CHARLES N. FOWLER. (Elizabeth, N. J.: Financial Reform Publishing Company. 1913. Pp. 514. \$2.50.)

Congressman Fowler makes a valuable and somewhat unique contribution to the current discussion of banking reform. The book is written in the form of a conversation between Uncle Sam and six citizens of various occupations. These hold seventeen weekly meetings. Starting with a discussion of elementary principles of money and banking, they progress to a study of the defects of the American banking system and finally agree upon a plan of reform. Written in popular and even colloquial style, the expression is nevertheless always clear and simple, in spite of occasional repetitions and digressions and lengthy elaborations of truths that might be more concisely stated.

Mr. Fowler is not altogether successful in his definitions of fundamental economic terms. Thus the definition of wealth as "whatever can be exchanged for money," including rights such as checks, bonds, etc. (pp. 104-5) can hardly be commended. We must take exception to such a sentence as this: "Wealth consists of property convertible into money, and therefore implies exchangeability, while property may not mean wealth at all, because the property has no exchangeable value" (p. 107). Other unfortunate concepts will be found in chapter 6 (pp. 101-117).

But all this is a small matter, detracting little from the general excellence of the argument and conclusions. Upon the fundamental principles of money and banking, Mr. Fowler is thoroughly sound and remarkably well-informed. Certain old-fashioned economic truths are driven home with irresistible logic and a wealth of historical evidence: That nothing should properly be called money except gold coin and bullion; that no credit instrument should be regarded as money; that a sound monetary system should consist of three things, gold coin (and gold certificates), subsidiary coin, and bank credit currency; that inexorable current redemption and a reserve of gold furnish the only basis of a sound credit currency; that one debt is not a safe reserve for another debt; and that there is no place in a sound monetary system for government credit currency—these are some of the truths which the author continually forces upon the reader. It is through disregard of these truths that the monetary history of the United States is a long dismal record of blunders and makeshifts with their attendant consequences. It is disregard of these truths that

is at the present moment threatening us with a "reform" of our banking system which perpetuates many of the fundamental fallacies from which we have suffered in the past.

Mr. Fowler's own plan, developed in the last three chapters, is in the reviewer's opinion deserving of the most careful consideration. Its main features are as follows: Authority is granted to national banks to do savings and trust company business, the assumption being that practically all commercial banks will eventually become national banks. Provision is made for refunding the two per cent bonds, abolishing the present bond-secured national bank notes, retiring the greenbacks, and making token money of the silver dollars. Every bank is compelled to carry reserves consisting of gold or gold certificates only. A note issue system is provided, similar to that in Canada. The country is separated into a number of commercial zones, each with a central clearing house. This central organization is to hold deposits, make exchanges, redeem checks and notes, make rediscounts, examine the banks of its territory, etc., performing thus the functions of a clearing house and central bank for its territory. Its organization is to be quite independent of the other zones, but brought into a national system through its relation with a national "American Reserve Bank." The reserves of the whole country will be held partly by the individual banks, but largely mobilized in the zone centers and the central reserve bank. A simple scheme of electing the officers of the various clearing houses and of the central bank would seem to put the management where it belongs and keep politics entirely outside. The United States government is relieved of the business of issuing credit currency or of keeping up its independent treasury.

Mr. Fowler's plan is based upon sound principles. In the reviewer's opinion, it is immeasurably superior to the Aldrich plan, which the author criticizes very severely, as well as to the monetary bill at present before Congress. Mr. Fowler has long stood as the champion of scientific banking reform. Few members of Congress in recent years have so fully grasped the economic principles on which alone a sound currency system can be established.

FRED ROGERS FAIRCHILD.

Yale University.

Le Banche e il Mercato Monetario. By MARCO FANNO. (Rome: Athenaeum. 1913. Pp. 395. 8 l.)

This volume is a stimulating contribution to economic literature.

It covers in an excellent manner the relation between the development of banking and the development of the money market, a field which, strangely enough, is but lightly touched upon by American and English writers. The footnote quotations from French, German, English, and American writers, as well as Italian, show a wide grasp of the subject from the standpoint of history and of theory, and would alone make the volume valuable.

Fanno traces the development of banking during the last three centuries through three stages of economic growth: (1) the agricultural period, to which belongs the development of the *banche di emissione*, or the banks of issue, adapted as they are to assisting in the monetary needs of agricultural communities; (2) the period of transition, in which originated the institutions of *credito mobiliare*, or commercial banks, and *banche di deposito*, or banks of deposit; (3) the industrial period, which saw the centralization of banking in all countries, coördinate with the general centralization of economic structure, and with the domestic and foreign expansion of individual institutions. Along with this analysis is a study of the coördination of these different kinds of banking institutions, the laws of their development, and the part they have played in gradually working out a division of labor and function, and all together forming a complete organism.

In the last chapter of part I, Fanno shows the close connection between the stock exchange and the various elements in the funds of banks. Between the stock market and the money market exists a connection intimate and reciprocal, a movement in the one reflecting itself in the movement of the other. Part II elaborates the activities and laws of the money market, based as they are upon the banking practices of the most advanced countries and having their movements balanced upon the daily movements of the short-time loan market. These laws of the money market are examined by separating them from the technical aspects of market phenomena and by reducing them to mathematical formulae, a method difficult for the non-mathematical student to follow.

Excellent chapters on the demand for and the supply of loanable funds lay the foundation for a discussion of the organic laws of the money market in three hypothetical cases: that of a single merchant, that of communicating countries having equal rates of discount, and that of communicating countries having diverse rates of discount.

DONALD F. GRASS.

Stanford University.

NEW BOOKS

- ADLER, K. *Kapitalsins und Preisbewegung*. (Leipzig: Duncker & Humblot. 1913. Pp. viii, 48. 1.20 m.)
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Public Finance, Taxation, and Tariff

Essays in Taxation. By EDWIN R. A. SELIGMAN. Eighth edition, completely revised and enlarged. (New York: The Macmillan Company. 1913. Pp. xi, 707. \$4.00.)

Seligman's *Essays in Taxation* has for long occupied so important a place among American works on the subject that it is a pleasure to welcome a new edition. First published in 1895, certain parts had gradually lost their usefulness in the face of the rapid progress which the past eighteen years have seen in the theory and practice of taxation. The book is now thoroughly revised and brought down to date and again deserves its place as probably the most valuable single American book on taxation. Professor Seligman excels, as always, in his careful analysis of laws and movements and in his exhaustive summaries of the world's

literature of taxation. On the other hand, one could wish that more original study had been given to the economic effects of taxation. On such questions Professor Seligman is inclined to content himself with summarizing the conclusions of other writers and official reports. This is especially noticeable in the account of the tax experiments of Australasia. Questions propounded in the earlier edition are still left unanswered, although sufficient time would seem to have elapsed to make a careful study fruitful of results (see pp. 465, 527-531).

Assuming that the reader is familiar with the earlier editions, the reviewer will attempt particularly to note the changes and additions now made.

Of the thirteen chapters of the old edition eleven are carried over to the new book with little change. Thus in the first five chapters the only important changes are the following: The historical account of the general property tax in the medieval period has been largely rewritten and some new matter added (pp. 39-56); slight additions are made in chapter 3 recording the recent development of the single tax movement in the United States; and in chapter 5 the account of the development of the inheritance tax in the United States is brought down to date (pp. 137-140). Chapter 8, on complications and conclusions of the corporation tax, and chapters 14 to 16, dealing respectively with the classification of public revenues, the betterment tax, and recent reforms in taxation, 1893-1895, are all practically identical with the corresponding chapters in the previous edition. The addition of a section on the literature of the United States to the chapter on recent literature in taxation and abstracts of four new tax reports added to the chapter on American reports on taxation, 1870-1900, are the only important changes in these chapters.

The most important changes made in the new edition are the complete revising of the first two chapters on the corporation tax; a new chapter giving a survey of the tax reforms adopted in 1909 and 1910 by the leading nations of the world; the addition of two chapters on recent American tax reports; and the introduction of five new essays on topics not covered in the old book.

Chapter 6, on the history of corporation taxation, has been largely rewritten. The account is brought down to date, much new matter is added, and the treatment is greatly improved. A valuable bibliographical note is added (pp. 142-145). Chapter 7, dealing with principles, is chiefly notable for the new discussion

of the relative merits of the tax on property and the tax on earnings, and, in case of the latter, of the question whether the basis should be net or gross earnings. Attention is given to the recent substitution of ad valorem for earnings taxes in Michigan and Wisconsin. Professor Seligman fails to find here any reason for changing his belief in the superiority of the earnings tax, and the argument in support of this conclusion appears to be unassailable. On the other hand, Professor Seligman's continued preference for the *net* earnings tax appears less defensible. His discussion of this question (pp. 242-3, 245-9, 258-60) is quite brief, and does not appear to have fully acknowledged the practical defects of the net earnings tax or the answers which have been made to certain objections to the gross earnings tax. Little recognition is given to the arguments of the Ontario and California commissions in favor of the gross earnings tax. In particular, the inference (p. 259) that the necessary use of net earnings as a means of ascertaining the rates of the gross earnings tax is an argument against the gross earnings tax itself seems almost to imply ignorance of the argument developed by the California commission. This chapter contains also an excellent account of the Supreme Court decisions by which the constitutionality of the earnings tax (properly drawn) has now been thoroughly established.

Chapter 17 treats of the reforms of 1909-1910, with enough of the intervening history to make the account intelligible. Professor Seligman fails to find in the great development of land taxation, and even in the new taxes on unearned increment, any comfort for the single taxpayers.

The last four chapters deal with the recent literature of taxation. The three chapters on American tax reports are remarkably complete and maintain the enviable standard which Professor Seligman's work along this line has always set. On the other hand, chapter 18, covering the non-official literature since 1885, is disappointingly meager. Little has been added to the analysis of European literature contained in the old book. Only the period up to 1900 is covered, the European literature of the present century being dismissed with a brief footnote on page 595, mentioning eight authors. The new section on the United States literature consists of reviews of Adams' *Science of Finance* and D. A. Wells' *Theory and Practice of Taxation*.

Chapters 9 to 13 are new to this book, although all have been

previously published elsewhere. Chapter 9, on modern problems in taxation, is a brief general discussion, which appeared first in the *Proceedings of the Congress of Arts and Sciences, Universal Exposition (St. Louis, 1904)*, vol. VII. Chapter 10, A Quarter Century's Progress in Taxation, is Professor Seligman's presidential address at the meeting of the American Economic Association in 1908 and needs no comment in this REVIEW. The next three chapters are essays previously published in the *Proceedings of the National Tax Association*. Chapter 11 is a strong appeal for separation of state and local revenues. It contains an argument in favor of the plan of apportioning state expenses among local bodies in proportion to the expenditures of the latter, rather than according to the assessed value of property, as is the present rule. Chapter 12, on the relations of state and federal finance, is chiefly noteworthy for the author's proposal that revenue be raised in the United States by federal taxes on incomes, inheritances, and corporations, the proceeds to be distributed in whole or in part among the states. Chapter 13 is a telling argument in favor of precision in assessments.

FRED ROGERS FAIRCHILD.

Yale University.

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Arrest in the growth of the rateable value of London. (London: London County Council. 1912. Pp. 24. 6d.)

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The increase in the national income and its relation to the increase of taxation. (London: Department of Social Economics of the London Municipal Society, June, 1913. Pp. 8.)

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Reports and communications, Vol. VIII. (Boston: Finance Commission. 1913. Pp. 205.)

Tax law of the state of New York; being l. 1909, chap. 62, entitled "An act in relation to taxation, constituting chapter sixty of the consolidated laws," with all amendments made at the legislative session of 1913. (New York: Baker, Voorhis & Co. 1913. Pp. 245. \$1.)

Classification normale des impôts d'état en France. (Paris: Le Comité Central d'Etudes et de Défense Fiscale, 21 Rue Croix-des-Petits-Champs. 1913.)

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Population and Migration

Immigration. A World Movement and Its American Significance.

By HENRY PRATT FAIRCHILD. (New York: The Macmillan Company. 1913. Pp. ix, 455. \$1.75.)

Professor Fairchild's *Greek Immigration*, which appeared in 1911, was a guaranty that any book by him on general immigration would be a thorough and valuable piece of work; and the present volume seems to the writer much the best treatment of the subject that has appeared in recent years. In any work of moderate size, dealing with so large a topic, certain limitations are inevitable. The material has increased so much in the last few years that writers are obliged to choose between a detailed statistical treatment with a minimum of discussion, and a narrative and critical statement with fewer tables of figures. Jenks and Lauck, in *The Immigration Problem*, chose the former method; while Fairchild follows the latter, often referring to other writers for statistical details. And yet he has summarized accurately the results of recent investigations, and added wise and cautious interpretations, in such a way that little of value to the general reader has been omitted.

The author points out in his preface (see also p. 166), that immigration may be considered from several points of view—that of the native American, that of the immigrant, and that of the world as a whole.

The immigration question is set forth as a part of an inclusive conservation program for all humanity. The modern situation is placed in its appropriate historical setting. Particularly, it is demonstrated that the popular notion that a belief in restriction is inconsistent with sympathy for the immigrant is false. The restrictionist may be the truest friend of the alien.

Fairchild devotes considerable space to colonial and early immigration, nearly one quarter of the book dealing with the period before 1882. This survey is one of the most interesting parts of the volume, because it contains much material not found in other recent works, and because it shows how early certain evils of immigration were recognized. Then follow a brief summary of federal legislation, and chapters on the volume and racial composition, the causes, and the effects of immigration. Next are discussed the methods of inspection, the condition of arriving aliens, their distribution, and their effect upon the standard of living. Then are considered the exploitation of immigrants, wages, pau-

perism, crime, insanity, industrial effects, social stratification, political effects, and the results of emigration in foreign countries. There is also an ample bibliography.

The great merits of the book are its comprehensiveness and its sane and well-balanced discussion of disputed points, especially in the interpretation of statistics. The author points out (p. 127) that the usual method of computing the net addition to population by comparing the numbers of immigrant and of emigrant aliens is defective in neglecting to take into account the permanent domicile of many non-immigrant and non-emigrant aliens. He disposes (p. 228) of the oft-repeated argument from the low density of population in the United States; and (p. 308) of the fallacy that immigrants force native workers into better positions.

Especially convincing is his discussion (pp. 215-226) of General Walker's theory that immigration has not increased population in this country. Although, unfortunately, Dr. Hourwich's *Immigration and Labor* had not appeared when this work was being written, the latter's arguments on Walker's thesis and on many other points are completely refuted. It is currently supposed that the ebb and flow of immigration constitute a safety valve in our industrial situation; but Fairchild, following Commons, shows (pp. 351-358) that there is good ground for thinking that immigration helps to cause crises and panics by preventing that rise in wages which would check overexpansion.

The author does not take up in detail recent suggested legislation or expressions of opinion on restriction, perhaps for lack of space. He condemns without qualification race prejudice, which, however, probably has distinct value as a conservative force. In a footnote, he complains that the word "recreation" does not appear in the indexes of recent works; but it may be noted that the word "eugenics" does not occur in his own. Apart from economic considerations, the present tendency is to regard regulation of immigration as a branch of national eugenics; the subject is covered, however, indirectly. The book may be cordially commended to all interested in immigration problems.

PRESCOTT F. HALL.

Gli Stati Uniti d'America e l'Emigrazione Italiana. By LUIGI VILLARI. (Milan: Fratelli Treves. 1912. Pp. 314. 3.50 l.)

The first two thirds of Signor Villari's book, describing American institutions and life for the sake of Italians in Italy, have

little of interest for Americans. Not so, however, the final third, since it gives the judgment of an observant Italian upon the Italian population of America. Compared with the considerable mass of American writings touching this population, there is only a meager offering by the Italians themselves, resident or visiting—such men as Preziosi, Mayor des Planches, Stella, Franzoni, for example. Villari's qualifications are that he has been a traveling inspector for the Italian emigration service, and a consul who has been stationed in important consular districts.

He studies the Italians in their colonies, in agriculture, and "afloat." He discusses their intellectual, religious, and political life, and the problems of their protection by the home authorities. He emphatically does not share the optimistic view of those who single out the first achievements of a foreign people in America, and hold them to be full of promise. Most emigrants he deems are not fitted for their task of settlement, and should not have left their country. Illiteracy and general lack of schooling destine them to failure. Those who have become rich were well-to-do before coming. In manufacturing, the Italians count for nothing; in importation of Italian products (largely for Italian consumption) some have done well; a few have succeeded in agriculture. But for most, the living and sanitary conditions are very bad compared even with those left behind; and in the cities the compensations that accompanied rural poverty in Italy are absent. In the colonies, cheapness and pettiness and fraud are omnipresent. The absurd "prominenti" as the leading citizens are called; the tenth-rate bankers who fatten on their prey of the ignorant and gullible; the treacherous newspapers with their personal rivalries, blackmail and cheating advertisements; the puerile mutual aid societies which today flourish, and tomorrow have left not even a trace; the parades ("parate") and banquets; the general absence of culture, independence, enterprise: these things are the sorry characteristics of a population of many hundreds of thousands.

Villari is disappointed. The issue between him and the optimists is scarcely one of fact, though it may be partly one of scope. Rather it concerns how much may legitimately be expected of so abundant a population. Villari predicts only good for his country, as for America, from the restrictive measure—literacy test or what not—which sooner or later he believes will be enacted by the American Congress. With his eminent father he shares the opinion that the emigrants who return to Italy, though richer in dollars, are poorer in health and in character. Students who reach

different conclusions upon a subject so little measurable statistically, and so little measured, will deem Villari prejudiced. It is his merit at least that he applies standards to the facts he observes.

ROBERT F. FOERSTER.

Harvard University.

La Question de la Population. By PAUL LEROY-BEAULIEU.
(Paris: Librairie Félix Alcan. 1913. Pp. iv, 512. 3.50 fr.)

Although disavowing the intention to write a tract for the times, M. Leroy-Beaulieu has made, in the present comprehensive study of the population problem, an appeal and a warning not only to France but to the whole white race. The first two books contain a history and critical analysis of population doctrines centering chiefly about the Malthusian theory. Malthus' contention as to the rate of increase is proved, with perhaps unnecessary fullness, to have been unfounded, the evidence being taken from statistics of European peoples, the United States, Argentina, and the French Canadians. Book III treats of the influence of modern civilization on the movement of population, book IV of the Neo-Malthusian movement, book V of the special situation in France, and book VI of emigration.

Not only was Malthus wrong, but "the danger to civilization is exactly the opposite of what Malthus believed it to be." The world can support at least double its present population, and unless the white race continues to produce a surplus for one or two centuries more it will be overwhelmed by black and yellow peoples in the struggle for mastery in Asia, Africa, and the Pacific. This note of alarm is almost identical with that recently sounded by Weale in his *Conflict of Color*. Malthus, thinks M. Leroy-Beaulieu, failed to foresee how profoundly modern psychic and cultural change would affect population. Two classes of causes account for this change. (1) Economic: under modern conditions, with child-labor legislation and the increased cost of rearing, children "do not pay" as they once did, and are an economic burden. (2) Personal-moral: education, family ambition, and excessive prudence make smaller families desirable, but even more potent influences are the spirit of ease and self-indulgence (summed up in M. Leroy-Beaulieu's graphic terms "*arrivisme*" and "*l'esprit arriviste*"), the decline of morality ("*neo-paganisme*"), and the feminist movement. "The masculinization of women is, from

every point of view, one of the great perils of contemporary civilization."

A favorite thesis of the author is that nations, like individuals, grow old, and that the present situation as to population, especially in France, is a mark of racial senility. He raises the serious question whether other nations are not destined to follow France toward stationariness or decline. For France there is the stern alternative of a speedy reform or depopulation and denationalization. Two centuries more of the present tendency would absolutely eliminate the French people. The remedy is clear and definite. It is to make the three-child family the normal one. Everything must be directed to this end. Not only must inheritance laws be changed, but public encouragement must be given to families having three or more children (*i.e.*, normal families) in the form of direct aid, preference in the public service and in housing, and plural votes for the fathers of such families.

In so far as the condition is due to economic causes these remedies might prove effective, but on the author's own showing the declining birth-rate is chiefly due to those secular psychic changes which temporary and external expedients would hardly reach. Of course the situation in France is exceptional, but it is critical largely because of military needs. Among most of the other civilized nations a lessening birth-rate is undoubtedly an economic and cultural gain. A good case may be made for the contention that most of the evils of population, at least outside of France, are not due to too low a rate of increase but to bad distribution of the population.

ULYSSES G. WEATHERLY.

Indiana University.

I Fattori Demografici dell' Evoluzione delle Nazioni. By CORRADO GINI. (Torino: Fratelli Bocca. 1912. Pp. 139.)

The Contributions of Demography to Eugenics. By CORRADO GINI. Translated from the Italian. (London: Charles Knight and Company. 1913. Pp. 99.)

The first of these two essays, given originally in the form of a lecture, and somewhat popular in treatment, undertakes to explain the growth and decay of nations by variations in the birth-rates of different elements in their populations. The causes, in turn, of these variations in birth-rates the author finds in the degree of economic development reached in any given instance. This is not

the simple correlation between advancing prosperity and a declining birth-rate, so generally familiar, but a somewhat more extended cycle of cause and effect. The author's generalizations are supported by much interesting historical and statistical material relating to the principal civilized countries.

Of special interest to American readers is the discussion of migration as a factor in evolution. The material collected here seems to throw doubt upon the generally accepted theory that the progressive decline in our native birth-rate is due to fear of competition with the immigrant. For the examples adduced seem to show that hope of advancement rather than fear of degradation is the prime motive for restriction of population, which would suggest that our native birth-rate declined, not because immigration threatened the prosperity of the native-born, but because it was actually pushing them up, as a class, to higher economic levels.

The second essay is a detailed and ingenious statistical inquiry into the reasons for the high infant mortality of the human species. The data given are obtained mainly from the official vital statistics of different countries, but partly from investigations specially made by the writer in the offices of municipal statistics at Rome and Cagliari, and the lying-in hospitals of several Italian towns. This enquiry correlates the number and characteristics of offspring with season of conception, season of birth, interval between births, age of mother, of father, age of parents at marriage, difference in age of parents, their duration of life, and certain special characteristics.

Some of the more important conclusions are that while for some countries a greater frequency of births and greater viability of offspring from spring conceptions seems to indicate an advantage in confining reproduction to a supposed original or "natural" period, wider statistical enquiry does not sustain this as a general proposition: that the human characteristic of reproduction at all seasons of the year may, however, have an indirectly deleterious influence upon offspring by favoring deliveries at too frequent intervals: that the younger the parents at marriage the greater the vitality and the better the physical and intellectual characters of the offspring: that permitting the reproduction of the weak and degenerate lowers the vital resistance of the race: and, finally, that the most practical present means of improving the quality and increasing the quantity of offspring is lowering woman's age at marriage. For this, says Professor Gini, would not meet with the

opposition of self-interest, sentiment, or animal instinct, as would other remedies proposed, such as the introduction of natural feeding, increase of interval between deliveries, prevention of the reproduction of the unfit, or even lowering the age of men at marriage, but is "concordant with the girls' desires, and the aesthetic sentiments of the men."

KATE HOLLADAY CLAGHORN.

New York School of Philanthropy.

NEW BOOKS

- BARNES, M. E. and L. C. *The new America, a study in immigration.* (New York: Revell. 1913. Pp. 160. 50c.)
- CHESTERTON, G. K. *The evils of eugenics.* (London: Cassell. 1913. 6s.)
- COLLETTI, F. *Dell' emigrazione italiana. Cinquanta anni di storia italiana (1860-1910).* (Milan: U. Hoepli. 1912. Pp. xii, 278. 10 l.)
- DAVENPORT, C. B. *State laws limiting marriage selection.* (Cold Spring Harbor, L. I.: Eugenics Record Office. 1913. Pp. 9. 40c.)
- ELDERTON, E. M. and others. *On the correlation of fertility with social value.* Eugenic laboratory memoirs, XVIII. (London: Dulau. 1913. 6d.)
- FINZIO, G. *Mortalita infantile in rapporto alle condizioni dei genitori.* (Rome: Tip. Ed. Nazionale. 1913. Pp. 22.)
- GARGAS, S. *Zur Regelung des Auswanderungswesens in Oesterreich.* (Vienna: Moritz Perles. 1913. Pp. 52. 1.20 m.)
- GRUNFELD, E. *Die japanische Auswanderung.* (Berlin: Behrend & Co. Pp. 157.)
- HERSCH, L. *Le Juif errant d'aujourd'hui. Etude sur l'émigration des Israélites de l'Europe orientale aux Etats-Unis de l'Amérique du Nord.* (Paris: Giard & Brière. 1913. 6 fr.)
- JOSEEPHY, F. *Die deutsche überseeische Auswanderung seit 1871 unter besonderer Berücksichtigung der Auswanderung nach den Vereinigten Staaten.* (Berlin-Wilmersdorf: Welt-Verlag. 1913. 3 m.)
- KAMPPMEYER, P. *Vom Kathedersozialismus zum Kathederkapitalismus. Eine Antwort auf Prof. B. Bernhardt's: "Unerwünschte Folgen der deutschen Sozialpolitik."* (Ludwigshafen am Rhein: Gerisch & Co. 1913. Pp. 48.)
- KNIBBS, G. H. *Commonwealth demography, 1912, and previous years.* Population and vital statistics, bulletin No. 30. (Melbourne: Commonwealth Bureau of Census and Statistics. 1913. Pp. 247.)
- KURTEN, O. *Statistik des Selbstmordes im Königreich Sachsen.* Ergänzungshefte zum deutschen statistischen Zentralblatt. 3. (Leipzig: Teubner. 1913. Pp. 145. 4s.)

- MARKTIAN, F. *Die österreichische Saisonwanderung*. (Vienna: Opitz. 1913. Pp. 30. 1 m.)
- MAYOR DES PLANCHES, E. *Attraverso gli Stati Uniti, per l'emigrazione italiana*. (Torino: Unione tip. ed. 1913. Pp. viii, 321. 6 l.)
- MICHEL, E. *La dépopulation en Normandie*. (Paris: Berger-Levrault. 1913. Pp. 60. 3 fr.)
- MITSCHERLICH, W. *Die Ausbreitung der Polen in Preussen*. (Leipzig: Hirschfeld. 1913. Pp. xv, 295. 8 m.)
- RASINI, C. *Di alcuni problemi sulla emigrazione ed immigrazione italiana: tesi di laurea*. (Torino: A. Vireto. 1912. Pp. 59.)
- ROLOFF, G. *Geschichte der europäischen Kolonisation seit der Entdeckung Amerikas*. (Heilbronn: Eugen Salzer. 1913. Pp. 248. 3 m.)
- ROSSIGNOL, G. *Un pays de célibataires et de fils uniques*. (Paris: Delagrave. Pp. xvi, 327. 4.20 Kr.)
- SEEBERG, R. *Der Geburtenrückgang in Deutschland*. (Leipzig: Deichert. 1913. Pp. viii, 76. 1.80 m.)
- SHRIVER, W. P. *Immigrant forces; factors in the new democracy*. (New York: Missionary Education Movement of the United States and Canada. 1913. Pp. ix, 277. 50c.)
- THEILHABER, A. *Das sterile Berlin*. (Berlin: E. Marquardt. 1913. Pp. 165. 4 m.)
- WILLIAMS, D. J. *The Welsh of Columbus, Ohio; a study in adaptation and assimilation*. (Oshkosh, Wis.: D. J. Williams. 1913. Pp. 144, illus. \$1.40.)
- ZIEMANN, H. *Ueber das Bevölkerungs- und Rassenproblem in den Kolonien*. (Berlin: Süsserrot. 1913. Pp. 28. 0.40 m.)
- *Agas and condition as to marriage*. Census, 1911, England and Wales. Vol. VII. Cd. 6610. (London: Wyman. 1913. 4s. 11d.)
- Mortality statistics, 1911. General death rates, specific and standardized death rates, infant and child mortality, causes of death*. Bulletin 112. (Washington: Department of Commerce. Bureau of the Census. 1913. Pp. 142.)

Social Problems and Reforms

NEW BOOKS

- BAWDEN, W. T., editor. *Proceedings of the sixth annual meeting of the National Society for the Promotion of Industrial Education, Philadelphia, December 5-7, 1912*. (Peoria, Ill.: Manual Arts Press. 1913. Pp. 309.)
- CHASE, J. F., BOOS, W. F., and KEBLER, L. F. *The dope evil*. I. *From a reformer's point of view*. II. *From a physician's point of view*. III. *From a statistician's point of view*. (Boston: N. E. Watch & Ward Soc. 1913. Pp. 38. Gratis.)

CLEVELAND, F. A. *Organized democracy*. American citizen series. (New York: Longmans. 1913. Pp. xxxvi, 479. \$2.50.)

COLLIN, R. *Les foyers nouveaux*. (Paris: Bloud et Cie. 1913. Pp. 170. 1.25 fr.)

The value of the coöperative method of home building and ownership seems to have become generally recognized in France, especially in the smaller communities where individual homes are still possible. It is unfortunate that only the economic aspect of the improved conditions resulting from this effort are emphasized in this book but the movement is still too new in France to lend itself to statistical study which would show a rise in the moral and sanitary conditions of the communities materially effected by coöperative building. Such material could, however, be found in abundance in England and Germany where careful studies have been made.

Dr. Collin deals with the organization of the various classes of coöperative building societies and gives in detail their histories so as to show their growing popularity and the changes in methods of administration and financing that have recently taken place. The part that state and municipal governments play in promoting the interest in the building society and individual ownership is especially illuminating. Tax exemption, legislation compelling investments on the part of savings banks, insurance companies, etc., and coöperative building schemes should be of especial interest to workers in America where restrictive and prohibitory legislative control has been exclusively resorted to, while the promotive work has been intrusted entirely to the speculative builder and real estate dealer who have commercialized every possibility for housing provisions.

The book is permeated with the French spirit of patriotism that throbs with a sense of social responsibility, indicating that French statesmanship has been applied to a national problem which in this country is generally being relegated to municipal and town governments.

CAROL ARONOVICI.

FELIX, M. *Les retraites ouvrières et paysannes*. (Paris: A. Rousseau. 1913. 20 fr.)

HENDERSON, C. R. *Social progress in the West*. (Chicago: University of Chicago Press. 1913. Pp. 28, 184. \$1.25.)

HOWERTON, J. R. *The church and social reforms*. (New York: Revell. 1913. Pp. 127. 75c.)

HYDE, W. D. *The quest of the best*. (New York: Crowell. 1913. Pp. vi, 265. \$1.)

ICHENHAUSER, E. *Frauenziele. Aufgaben der Frauenbewegung*. (Berlin: A. Schall. 1913. Pp. 345. 3 m.)

KERSCHENSTEINER, G. M. A. *The idea of the industrial school*. Translated from the German by RUDOLF PINTER. (New York: Macmillan. 1913. Pp. 11, 110. 50c.)

LEAKE, A. H. *Industrial education, its problems, methods and dangers*. (Boston: Houghton Mifflin. 1913. Pp. xi, 205. \$1.25.)

LEHR, A. *Wohnungsgeschichte und Wohnungsbau*. Schriften des bayerischen Landesvereins zur Förderung des Wohnungswesens, 9. (Munich: Reinhardt. 1913. Pp. vii, 59. 1 m.)

LEVY, H. *Economic liberalism*. (London: King. 1913. 4s. 6d.)

MCCANN, A. W. *Vital questions and answers concerning 15,000,000 physically defective children*. (Cleveland: F. M. Barton. 1913. Pp. 57. 50c.)

MCCARTHY, C. *The Wisconsin idea*. (New York: Macmillan. 1912. Pp. xvi, 323. \$1.50.)

For the last ten years Wisconsin has led our American commonwealths in legislative experimentation, especially in the field of socio-economic legislation. As a result, students of such legislation, reformers, and even politicians have been turning with interest to Wisconsin to learn how the thing has been done, and what have been the actual results of the new laws, so far as those results can now be judged. Mr. McCarthy, as chief of the Legislative Reference Library of the Free Library Commission, and who has had a great deal to do with the framing and enactment of the new laws, is constantly receiving inquiries regarding them, and he has written *The Wisconsin Idea* primarily to answer such inquiries.

The book will be a handbook for the legislator, and for every student of American legislation who is interested in the method as well as the substance of law making. GEORGE RAY WICKER.

MCCRACKEN, T. C., editor. *Handbook of opportunities for vocational training in Boston (regular college courses excepted)*. (Boston: Women's Municipal League. 1913. Pp. ix, 301. \$1.25.)

MOTLEY, J. M. *Housing rehabilitation*. A reprint of part IV of the San Francisco Relief Survey. (New York: Survey Associates, Inc. 1913. Pp. 63.)

The investigation deals with the policy and methods followed in furnishing temporary shelter and permanent homes after the San Francisco earthquake. The social status of each family, its earnings, size of accommodation, and rent paid before the earthquake and two years later are examined. Suggestions for future housing rehabilitation on the basis of San Francisco experience are offered.

J. F.

NORRIS, G. W. *The housing problem in Philadelphia*. Catholic summer school extension lectures. (Philadelphia: J. J. McVey. 1913. Pp. 30. 10c.)

PATON, J. S. *Progress and plenty; advocates the single tax, a scientific currency and a minimum wage to abolish poverty and unemployment*. (Boston: Christopher Press. 1913. Pp. 136. \$1.25.)

REVILLE, M. *L'enseignement technique et l'apprentissage*. (Paris: Dunod & Pinat. 1913.)

RUSSELL, G. W. *Coöperation and nationality; a guide for rural reformers from this to the next generation*. (Baltimore: Norman, Remington & Co. 1913. Pp. 103. 50c.)

SEEBERG, R. *Der Geburtenrückgang in Deutschland.* (Leipzig: Deichert. 1913. 1.80 m.)

STRACHEY, J. S. *The citizen and the state: industrial and social life and the empire.* Second edition, revised. (London: Macmillan. 1913. 8d.)

WEBER, A. *Die Steuerpläne der Bodenreformer, ein Hemmnis der Wohnungsreform.* (Berlin: Verband zum Schutze des deutschen Grundbesitzes und Realkredits. 1913. Pp. 15. 0.20 m.)

WEGENER, H. *Geschlechtsleben und Gesellschaft. Das sexuelle Problem und der soziale Fortschritt.* (Hagen i.W.: Otto Rippel. 1913. Pp. 209. 1 m.)

——— *Opium question in China. Reports from H. M. Minister at Peking.* 6876. (London: Wyman. 1913. 8d.)

Reports of proceedings at a conference on the best method of training women clerks and secretaries. (London: King. 1913. 6d.)

Second annual report of the Philadelphia Housing Commission. (Philadelphia. 1913. Pp. 31.)

In addition to the customary review of the year's accomplishment in the betterment of local housing conditions, Dr. B. J. Newman submits a study of the effect of forced improvements upon rents. "The data cover 1,065 houses where the cost of improvement approximates \$100 per house. Only 76, or 7.1 per cent, had an increased rental following improvements. In some cases the increase was complicated by the addition of other [voluntary] improvements of a more costly nature. In 16 instances the rents had been reduced. The truth is that two factors constantly act upon the increase in rentals. One is the law of supply and demand determining the case of renting a similar property if the rent of the one in which the tenant is living is raised beyond his means; the other is, that there is a maximum rental for every house beyond which the house will not rent, and unless the neighborhood conditions change this maximum is inflexible, irrespective of such improvements as above mentioned being installed." J. F.

——— *Tenements in administrative counties and urban and rural districts.* Census, 1911, England and Wales, Vol. VIII. 6910. (London: Wyman. 1913. 5s. 6d.)

Trades for factory workers. Trades for industrial art workers. (New York: Alliance Employment Bureau. 25c., 15c.)

Insurance and Pensions

Folk-pensioneringen. By LINDSTEDT and MARCUS. (Stockholm: P. A. Norstedt & Soners Forlag. 1913.)

This treatise on the Swedish old-age and invalidity act, recently approved by the king and to be put into operation January 1, 1914, has especial interest because compiled under the direction

of the chairman of the commission whose four-volume report, the result of five years study of the problem as represented in Sweden and as dealt with in foreign lands, was submitted to the Storting last November. In 88 pages, Professor Lindstedt summarizes the conclusions of the full report, gives a history of the discussion that led up to the practically unanimous adoption of the law and the modifications in its course through the legislative body, and interprets the several sections of the law. The historical introduction has especial interest for the general reader.

The agitation for some adequate provision for the declining years of laborers whose industry had not enabled them to provide for themselves and who might therefore be forced to come upon the poor rates, began in Sweden as early as 1828, when a proposition that employers be required to make annual contributions to an insurance fund in the interest of their workmen and workwomen was presented to the Storting. The bill failed, but similar propositions were made in 1840, 1851, 1856, and 1863. In 1884, the first committee on workingmen's insurance was appointed, and in its deliberations and conclusions regarding workmen's compensation for accidents, sickness insurance, and old-age pensions, all subsequent legislation originates. Under the last head, the committee recommended that insurance against old age and invalidity be made obligatory on all classes, the well-to-do being required to pay an annual premium of 13 krone for ten consecutive years, while the premiums of those unable to meet the requirement should be met for a maximum of five years from the communal treasuries. The state was to meet the cost of administration and to pay the pensions of such citizens as had passed the age of contribution. A second committee on social insurance, appointed in 1891, reported in 1893 in favor of the obligatory insurance of wage-earners whose annual revenue was less than 1,800 krone, but their contributions were to be graded according to income, and the pensions as well. Employers and the state were also to contribute to this insurance fund, the former in the ratio of one fifth and the latter two fifths of the total premiums. To this proposal, the employers raised such a storm of opposition that the bill submitted in 1898 abandoned the employers' contribution and substituted a heavier burden upon the national treasury. The bill of 1905 returned to the policy of a universal contribution imposed upon every registered citizen between the ages of eighteen and sixty years, and this is the principle on which the report of the recent commission is based. The law of 1913 renders insurance against old age and

invalidity obligatory on all classes. Men and women alike contribute to the insurance fund a premium of from 3 to 13 krone per year. Pensions are also graded by income, men receiving 30 per cent and women 24 per cent of the amount he or she has actually paid in, as an annual pension, but an additional pension is awarded to all whose incomes from other sources fall below 300 krone.

Professor Linstedt's interpretation of this interesting piece of social legislation will be translated into English, French, and German in due course.

KATHARINE COMAN.

Copenhagen, Denmark.

NEW BOOKS

ANDERSON, L. A. *Valuation and readjustment of assessment life companies and fraternal societies.* (Madison, Wis.: University Co-operative Co. 1913. Pp. 91. \$5.)

DEITCH, G. A. *Insurable interest.* (New York: Spectator Co. 1913. Pp. 19. 20c.)

DU PASQUIER, L. G. *Mathematische Theorie der Invaliditätsversicherung.* (Bern: Stämpfli & Co. 1913. Pp. 153. 3.50 m.)

FULLER, H. B. *The law of accident and employers' liability insurance.* (Kansas City, Mo.: Vernon Law Bk. Co. 1913. Pp. xii. 568. \$5.)

GEPHART, W. F. *Insurance and the state.* (New York: Macmillan. 1913. Pp. xiii, 228. \$1.25.)

To be reviewed.

IRANYI, B. *Die deutschen Lebens- und Unfall-Versicherungs-Gesellschaften. Uebersichtliche Darstellung der Geschäftsergebnisse in den Jahren 1908-1912.* 22. Jahrgang. (Vienna: J. Eisenstein & Co. 1913. Pp. 40. 1.25 m.)

KUHN, R. *Das Brandversicherungswesen im Königreich Sachsen. Abhandlungen aus dem volkswirtschaftlichen Seminar der Technischen Hochschule zu Dresden, 5.* (Leipzig: Duncker & Humblot. 1913. Pp. viii, 203. 5 m.)

MINUTILLI, G. *Nozioni di scienza attuariale. Matematica delle assicurazione.* (Milan: Hoepli. 1913. Pp. xiii, 329, 87 tables. 4 l.)

MOLT, W. *Der Kreditversicherungsvertrag, zugleich einen Beitrag zu den allgemeinen Lehren des Versicherungsrechts.* (Stuttgart: Kohlhammer. 1913. Pp. viii, 154. 3.50 m.)

RUBINOW, I. M. *Social insurance.* (New York: Holt. 1913.)

To be reviewed.

First report of the proceedings of the Board of Trade under part II of the national insurance act, 1911, with appendices. 6965. (London: King. 1913. 9d.)

Old age pensioners and aged pauperism. Comparative statement, 1906 to 1913. 7015. (London: King. 1913. 5d.)

*Wehrbeitragsgesetz und Besitzsteuergesetz (Vermögens-
zumachssteuergesetz) nebst Gesetz über Aenderungen im Finanz-
wesen.* (Berlin: Vahlen. 1913. Pp. 112. 1.20 m.)

Pauperism and Charities

NEW BOOKS

ASHBY, A. W. *One hundred years of poor law administration in a
Warwickshire village.* (New York: Oxford University Press. 1913.
\$4.15.)

DAVEY, H. *Poor law settlement and removal.* Second edition. (Lon-
don: Stevens & Sons. 1913. 15s.)

FUNK, M. J. *Geschichte und Statistik des bremischen Armenwesens.*
(Bremen: F. Leuwer. 1913. Pp. vi, 195.)

*Poor laws and relief of distress. Royal commission.
Appendix.* Vol. XXXVII. Cd. 5443. (London: Wyman. 1913.
8s. 7d.)

Socialism and Co-operative Enterprises

Coöperation in Agriculture. By G. HAROLD POWELL. (New
York: The Macmillan Company. 1913. Pp. 327. \$1.50.)

The most frequent objection urged against books dealing with coöperation is that they are written by enthusiasts, by dreamers, by those who consider it a cure-all for various economic and social evils. But in Powell's *Coöperation in Agriculture*, the author, although a staunch advocate of coöperative principles, gives the reader a volume that avoids criticism on that score and at the same time constitutes a most excellent and noteworthy contribution to the literature of the subject.

Mr. Powell is a thoroughly practical and experienced coöperator and for some years past has been the manager of the California Fruit Growers Exchange, one of the most successful coöperative enterprises of its character in the United States. He knows, as few others do, the dangers and the advantages of coöperative activity, and at no time throughout his discussion does he stress one at the sacrifice of the other. He frankly confesses that few of the attempts at coöperation

have been successful, and it is probably not overstating the case to say that still fewer have been founded on principles which if generally adopted would help in the solution of the rural economic and social problem. . . . Many of them have been formed by impractical enthusiasts with high motives but with little business experience, de-

siring to reform everyone except themselves, to wage war on their neighbors who do not affiliate, to fight every competitor, and to found the organization on enthusiasm, altruism and general discontent.

On the other hand, however, he maintains that there is much in coöperative endeavor to commend itself to those who will approach it in a sane and businesslike manner.

The fundamentals of agricultural coöperation are declared to be: (1) The successful coöperative organization must be founded on a special industry such as cotton, tobacco, milk, butter, poultry, small fruits, and the like. (2) The area which it covers must be comparatively small in extent. (3) The population of the community must be of a stable character. (4) The association must be started only after the farmers have felt the pressing need of getting together. (5) There must be federation with a considerable amount of autonomy for the constituent local associations. Considerable space is devoted to a discussion of the form of organization, the legal principles involved, the matter of finances, and the more important difficulties to be overcome.

Practically two thirds of the volume is taken up with an exposition of the methods of various coöperative enterprises of interest to the farmer, such as the breeders' and growers' associations at home and abroad, the associations which market grain, eggs, milk, butter, cotton, and fruit, and those which carry on irrigation projects, mutual insurance, the purchasing of supplies, the establishment of rural credit, and the construction and management of rural telephones. A short bibliography of the more important references is also included.

Mr. Powell has not attempted to cover the entire field of agricultural coöperation, but has confined himself to its more important phases. His work shows a grasp of the issues involved and a ripeness of conclusion that comes only from actual contact with the practical side of coöperation.

IRA B. CROSS.

Stanford University.

The Servile State. By HILAIRE BELLOC. (London: T. N. Foulis. 1912. Pp. 189. 2s. 6d.)

The Real Democracy. (First Essays of the Rota Club.) By J. E. F. MANN, N. J. SIEVERS, and R. W. T. COX. (London: Longmans, Green and Company. 1913. Pp. x, 276. \$1.50.)

These two books are from the same group of thinkers and represent the same point of view. Mr. Belloc leads off with a

sharp attack upon the modern industrial system including the modern trend of economic reform. His disciples of the Rota Club in *The Real Democracy*, which is inscribed to Mr. Belloc, labor the same points more exhaustively and then disclose their scheme, or perhaps better, their vision of constructive reform. Because of their similarity, the two books may be discussed together.

The main thesis may be summed up in a few words. The next stage in economic evolution is to be a servile state "in which those who do not own the means of production shall be legally compelled to work for those who do and shall receive in exchange a security of livelihood"; in other words, the wage-earners have become enslaved. The inevitableness of this next stage arises from the fact that the present form of social organization is unstable because "the ownership of the means of production is confined to a body of free citizens not large enough to make up properly a general character of that society." For this condition of affairs there are two possible solutions: (1) A return to the idyllic condition of the Middle Ages when "slavery had gone and in its place had come that establishment of free possession which seemed so normal to men and so consonant to a happy human life"; or (2) the adoption of collectivism.

The former is a reaction to which, unfortunately, society does not lend itself readily; while those who aim to occasion the latter will be warped from their purpose by the forces of circumstance. The so-called moral basis of property and the complexities of modern property rights, Mr. Belloc admits, make it inexpedient to confiscate all property and "the proposition to buy out the capitalist in lieu of appropriating him is vain." Thereupon social reformers will have recourse to "measures to secure security and efficiency." This involves loss of legal freedom for the wage-earner but offers "the very real prospect of having enough and not losing it." Consequently, this opportunity will be eagerly grasped by the poverty-stricken proletarian.

The handle to this line of argument lies in the English employers' liability act, the insurance act, the minimum wage boards, and similar acts of legislation. These furnish examples, he believes, of status taking the place of free contract, because in these matters capitalists and wage-earners are classified *as such* and differ as to legal disability and obligation. Moreover, "the principle of a minimum wage involves as its converse the principle of compulsory labor" and with this the demonstration is completed. This is Mr. Belloc's challenge to the modern industrial movement.

In *The Real Democracy* the challenge is taken up and argued to great length but in no wise differently. The second book, however, goes beyond destructive criticism and holds up as a new ideal the associative state which is to be composed of an association of city states which in turn are to be organized on the principle of association. These associations, really guilds, are to "own as corporations a proportion of their capital, remunerate their members partly in wages or salary, partly in dividends representing the remainder of the capital contributed by the members."

The whole scheme as worked out results in a blend of syndicalism and debilitated state socialism. The state as a political organization, indeed, is to remain, but apparently is to be a secondary factor.

A guild ought to be able to plan its own activities directly and as a whole and not to find the expression of its general will conditioned and hampered at every point by the wills of state officials elected or appointed.

On the other hand, it is for the state to "require a standard." The latter proviso is not clearly worked out; and how it would be possible, in view of the wide liberty that is to be given to the guilds, for the state to effectively require this standard does not appear. It would seem that these thinkers have endeavored to work out equality in terms of economics with a background of natural rights theory, an attempt in the nature of things bound to be rather futile in the twentieth century.

DUNCAN A. MACGIBBON.

Brandon College.

L'Evolution Historique du Socialisme Moderne. By M. TOUGAN-BARANOWSKI. Translated by JOSEPH SHAPIRO. (Paris: Librairie Marcel Rivière et Cie. 1913. Pp. 246. 5 fr.)

The book is divided into four main parts consisting of an introduction, a criticism of the capitalistic organization, an outline of the proposed socialistic organization, and the method of bringing the latter to pass.

In the introduction is found an exposition of socialism, which is contrasted with individualism and anarchism. The author believes that since no genuine individualism can develop except in society, the highest type of individualism can develop only in a socialistic society. The present "anarchy in production" he condemns not alone because it dooms the laborer to poverty, but because it is

unable to produce anywhere near the amount possible under a rational, harmonious system. As to the socialist state the author believes in centralization of authority, but would nevertheless leave as much as possible to voluntary association. Anarchy and socialism are opposing concepts, though there will no doubt be many associations in the future, scientific, literary, and the like, run on the plan of anarchism, that is, with perfect freedom to the individual. This does not, however, suggest the possibility of applying the plan to the state. The ideals of socialism are to be realized not all at once but gradually. Socialism is coming through evolution, but it should be helped along by the conscious effort of mankind. The abolition of the right of inheritance and the imposition of a strongly progressive income tax would make the final acquisition of the means of production comparatively easy.

The author traces the development of socialistic ideas and treats men and schools incidentally. There is little new in the book but it treats clearly and sympathetically the development of the doctrine of modern socialism.

B. H. HIBBARD.

University of Wisconsin.

NEW BOOKS

COLE, J. R. and SILVER, G. *Socialist dialogues and recitations.* (Chicago: Kerr. 1913. Pp. 59. 25c.)

DAVIES, E. *The case for nationalisation.* (London: Collins. 1913. Pp. 257. 1s.)

DOMACK, H. *Der Genossenschafts-Sozialismus.* (Leipzig: Ernst Möhrings Verlag. 1913. Pp. viii, 127. 2 m.)

ENGELS, F. and MARX, K. *Briefwechsel 1844-1883.* Edited by A. BEBEL and E. BERNSTEIN. Four volumes. (Stuttgart: J. H. W. Dietz. 1913. 40 m.)

GOLLANCZ, V. *Dialogue on socialism.* The Chancellor's latin essay, 1913. (London: Blackwell. 1913. 1s. 6d.)

GREENE, T. E. *Socialism in faith and practice.* (St. Louis, Mo.: National Rip-Saw Pub. Co. 1913. Pp. 40. 10c.)

ISSAIEFF, A. A. *Individualität und Sozialismus.* Authorized translation from the Russian by KARL KUHL. (Berlin: Prager. 1913. Pp. 92. 1 m.)

KIRKUP, T. *A history of socialism.* Fifth edition, revised and edited by E. R. PEASE. (London: Black. 1913. 5s.)

MILLAR, G. T. *Constructive socialism.* (Los Angeles, Cal.: Voluntary Coöperative Association. 1913. Pp. 37. 10c.)

- PEASE, E. R. *Profit-sharing and co-partnership: a fraud and a failure?* Fabian tract, 170. (London: Fabian Society. 1913. Pp. 16. 1d.)
- SCHLOESSER, H. H. *The nationalization of mines and minerals bill.* Fabian tract, No. 171. (London: Fabian Society. 1913. Pp. 15. 1d.)
- ROBERTS, I. *Looking forward; a study in social justice looking to coöperation as offering the solution of difficulties.* (Philadelphia: Roberts & Co. 1913. Pp. 5, 315. \$1.)
- ROBINSON, M. F. *The spirit of association: being some account of the guilds, friendly societies, coöperative movement, and trade unions of Great Britain.* (London: Murray. 1913. Pp. 403. 6s.)
- WILBRANDT, R. *Die Bedeutung der Konsumgenossenschaften.* (Göttingen: Vandenhoeck & Ruprecht. 1913. Pp. 28. 0.50 m.)
- ZETKIN, K. *Karl Marx und sein Lebenswerk! Vortrag. Mit einem Anhang: Literatur über Marx und von Marx.* (Elberfeld: Freie Presse. 1913. Pp. 47. 0.25 m.)

Statistics and Its Methods

La Théorie de l'Homme Moyen. Essai sur Quetelet et la Statistique Morale. By MAURICE HALBWACHS. (Paris: Librairie Félix Alcan. 1913. Pp. 180. 2.50 fr.)

In this very interesting little volume on a much debated statistical subject there are five chapters, of which the first and the fourth are respectively descriptive of Quetelet's conception of the average man physically and morally viewed. The second and third chapters are critical of the physical concept and the fifth of the moral. A conclusion gives a resumé of the principal views of the author. The presentation of Quetelet's views is systematic and faithful; but as indicated below the interpretation is not always adequate. In the critical chapters, are taken up in turn many of those problems regarding the average man which have been objects of dispute for half a century—the reality of the average man, the average as a type of the species, as the perfect in beauty and goodness, its relation to birth and death statistics, the equality of the sexes, and the significance of the so-called "tendency" to commit crime. One is struck with the complete absence of references to the problem of free will which one must struggle to avoid in writing about Quetelet and to which another recent writer in this field has devoted considerable attention.¹

¹ *Quetelet: Statisticien et Sociologue*, by Joseph Lottin (Félix Alcan, 1912). Reviewed by present writer, in *Political Science Quarterly*, vol. xxvii, pp. 718-723.

Two views characterize the author's criticisms throughout. In the first place he thinks the conception of the average man is not in harmony with that theorem of probabilities which requires that the elements involved shall be independent of each other. This point is repeatedly insisted upon (pp. 53, 97-8, ch. 5, conclusion, *passim*). That is, the average man does not result from the statistical massing of many unrelated and wholly disparate men, but rather is the result of measurements on many men related by multitudes of physical and social bonds, and therefore mutually dependent. As a consequence, the author holds, the theory of probabilities cannot apply. Here also hinges the second characteristic of the author's views—namely, that biological and social conditions are competent to explain statistical results and therefore the probabilities theory need not be intruded.

To make the author's meaning clear let us take the distribution of heights. He holds that in order for the theory of probabilities to apply one must establish that the persons measured "are independent one of another and of all those who have preceded them," (p. 163). But now since the young men aged twenty of a nation are related and mutually dependent, "the conditions in which the theory of probabilities might apply are not realized" (p. 164).

Here is truth mingled with error. Undoubtedly the individuals of a nation are related and mutually dependent, but it is equally undoubted that the theory of probabilities does apply. This is merely a statement of fact. The work of Quetelet on this point has been so fully supplemented by that of Galton, Pearson, and the anthropologists that mere opinion to the contrary counts for naught. When our author goes to the extent of dispensing with the law of large numbers on the purely theoretical ground that the group studied must be composed of wholly unrelated individuals he likewise runs counter to well-established facts and usage. He thus states the opposite of the fact when he says (p. 174) that society and moral actions constitute "the realm in which the calculus of probabilities is least applicable." And he reveals a lack of full comprehension of statistical method when he adds that Quetelet's theory "from the standpoint of scientific research, presents this great inconvenience, either of condemning us to remain ignorant of causes, or, if we wish to attain them, of engaging in calculations of an infinite complexity" (p. 174-5). Halbwach's theory is contrary not only to fact but to theory as well. Why should not one with equal cogency argue that the

theory of probabilities will not apply to the results of tossing a dozen pennies because the pennies are related, being made from the same substance, molded in the same dies, and thrown from the same hand? The infinite variations in the numerous conditions of heredity and environment make necessary the statistical method developed by Quetelet as a means of finding order in chaos.

The second characteristic of the author's criticisms does not do justice to Quetelet. He repeatedly implies that the latter considered the theory of probabilities as constituting in itself an adequate scientific explanation of the phenomena studied. (See pp. 61 to 69, 89 to 99, 134 to end of ch. 5, and 161 *et seq.*) Indeed, the author seems to think that Quetelet's theory was that statistical regularities are to be explained solely as the chance results of the actions of many detached and unrelated individuals. For this crude explanation the author would substitute those biological and social conditions essential to the appearance of the phenomena. Thus the regular distribution of heights is explained not by the probabilities theory but by "organic constitution, physical milieu, and their mutual adaptations" (p. 68); the equality of the sexes is not to be explained by the laws of chance but by Düsing's theory of auto-regulation "modified by sociological considerations" (pp. 90 *et seq.*); so also other facts (pp. 97-8).

Now all this is to leave out of account Quetelet's whole conception of the "social system" and the consequent emphasis he laid on social factors. Indeed, Halbwachs himself inconsistently emphasizes this (pp. 104 and 133). The more consistent interpretation of Quetelet is that he held the mathematical presentation not in itself an explanation but rather a means whereby the phenomena could be connected with social and physical conditions. The author, following Durkheim, says that in Quetelet's view the "real cause" of the normal is its greater probability and not the relations that may be discovered between the character studied and its conditions of existence. Now it is true that Quetelet held the most frequent result to be the normal, but he sought to connect it and the variations from it with concrete circumstances.

Nevertheless, this volume should be read by all interested in its problems. While it has neither the historical nor philosophical interest of Lottin's work it is more pointed and stimulated.

F. H. HANKINS.

Clark University.

NEW BOOKS

BALLOD, C. *Grundriss der Statistik: Bevölkerungs- Wirtschafts-Finanz- und Handels-Statistik.* (Berlin: Guttentag. 1918. Pp. vii, 348. 10 m.)

CONRAD, J. *Grundriss zum Studium der politischen Oekonomie.* Vol. IV. *Statistik.* Part II. *Die Statistik der wirtschaftlichen Kultur: Berufsstatistik, Agrarstatistik, Forst- und Montanstatistik.* Second edition. (Jena: Fischer. 1913. Pp. ix, 273. 6.50 m.)

RICCI, U. *Statistique internationale des états des cultures.* (La Haye: Société Anonyme "Drukkerij Trio". 1913. Pp. 92.)

Professor Ricci is chief statistician of the International Institute of Agriculture, and has been impressed by the chaotic condition of agricultural statistics as now reported. Especially difficult of comparison are these statistics since unlike expressions are used for designating the same conditions and again identical expressions are used to designate conditions which are unlike.

It is proposed by the author to create a table into which the reported data may be fitted in such manner as to permit the summation of terms both horizontally and vertically. The horizontal sum will give the average acreages for a given country for a period of ten years, the estimated acreages of the current year to be given in the form of a percentage of the ten-year average. In a separate table the same thing will be done for reported yields per acre, and the two combined into a table showing total estimated production. This final table will be called an *indice unitaire*.

In addition to the exposition of the plan proposed there is given an analysis of the present systems of reporting the condition of crops. The systems used are designated by the terms "valuation" and "classification." By the system of valuation the report is in such shape as to express the yield in its mathematical relation to an assumed base. In the system of classification the scale used consists of words such as *poor, fair, good*, etc., and an exact mathematical deduction is hard to draw. The "valuation" system is preferable.

It is believed that a report based on the known results of the ten preceding years and corrected from month to month during the growing season will result in information which will preclude the probability of artificial prices. Concerted action on the part of the different countries will be necessary in order to carry this plan into effect.

B. H. HIBBARD.

Statistics for Hawaii. Containing statistics of population, agriculture, and manufactures for the territory, counties, and cities. (Washington: Dept. of Commerce. Bureau of the Census. 1913. Pp. 57.)

Statistics for Porto Rico. Containing statistics of population, agriculture, and manufactures for the territory, municipalities and cities. (Washington: Dept. of Commerce. Bureau of the Census. 1913. Pp. 91.)

Year-book of the city of Buenos Aires. (Buenos Aires: Statistical Dept. 1913. Pp. xlviii, 460.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

COLD STORAGE. The Department of Agriculture has published two bulletins dealing with the subject of cold storage. Bulletin 93, *Cold Storage Business Features* (pp. 86), by George K. Holmes, consists of two parts entitled respectively Reports of Warehouses to the Department, and Marketings. The warehouse reports were secured on schedules prepared by the department and covering a period of two years from March, 1909, for poultry and eggs, and from May, 1909, for butter, beef, mutton, and pork. The difference in time represents a rough effort to begin the year at the time when the quantity of the commodity in cold storage begins to increase from the month of lowest ebb.

The facts brought out in part I fall into three captions, namely: Length of Time in Storage, Costs of Storage, and Fraction of Production Going Into Cold Storage.

The most significant part of the information on the length of time in storage is set forth in diagrams which show for 1910-1911 the percentage of the year's receipts into storage and of deliveries from storage assignable respectively to each month of the year (p. 29); percentage of receipts into storage for each of the six commodities, 1909-10, delivered after storage of 1, 2, 3, etc., up to 16 months (p. 35); average length of time of storage of receipts of year 1909-10 by months.

Tables show that 36.7 per cent of beef stored was delivered in 1 month and that the bulk of it was delivered before the expiration of 7 months. The largest monthly percentage for mutton was 28.8 in the sixth month, delivery being nearly completed in the eighth month. Delivery of pork was 78 per cent within a month, with about 3 per cent remaining after 3 months; poultry, 22 per cent delivery for the first month, 26 per cent for the second, with the bulk delivered within 8 months. Largest deliveries of butter were 12 to 14.5 per cent each month from second to the sixth month, the bulk being delivered within 10 months; eggs, largest monthly deliveries in sixth month (18 per cent) and seventh (21 per cent), delivery completed in 11 months. The extreme length of time in storage was represented by one warehouse where "there was discovered some fresh mutton that had been in cold storage 27½ months, and this was 10.2 per cent of the fresh mutton receipts of all reporting warehouses for May, 1909," the month when the period of storage began. Of butter, 0.3 per cent of May,

1909, receipts remained $27\frac{1}{2}$ months and 0.1 per cent of poultry remained $26\frac{1}{2}$ months (p. 86).

Taking the storage year 1909-10, which begins for each commodity with the month when increase from the lowest ebb sets in, the percentages carried over to the next year were as follows:

	Beef	Mutton	Pork	Poultry	Butter	Eggs
Year beginning	Sept. 1	Aug. 1	May 1	Aug. 1	May 1	March 1
Per cent carried to next year	9.6	15.1	12.6	7.7	12.5	0.5

The report shows the cost of storage, plus insurance and interest, in relation to the mean wholesale prices of the respective commodities in from 2 to 13 cities during the heavy storage months in 1910-1911. For butter and fresh mutton, which show respectively the lowest and highest percentage of price, the figures are as follows:

Length of storage [in months]

Storage cost as per cent of price

butter	2.4	7.8	14.6	21.9	29.2	36.5
mutton	3.8	11.5	28.0	34.5	46.1	57.6

The percentage of total production going to storage was found to be 3.1 for beef; 4.1 for mutton; 11.5 for pork; 9.6 for butter; 15 for eggs.

Part II gives tables showing the relative monthly receipts of butter and eggs into New York, Boston, Chicago, St. Louis, and Milwaukee, from 1880 to 1911. These are followed by further estimates and tables to show cold storage as a fraction of supply.

Bulletin 101 (*Cold Storage and Prices*, by George K. Holmes, pp. 116) is an attempt to analyze price movements in the principal storage commodities from 1880 to 1911, comparing especially prices from 1880-1892 with those from 1902-1911. Great pains has been taken to get price quotations for both periods for a large number of cities in different parts of the country. Figures are weighted to show the influence of consumption and the most significant results are reproduced in diagram. Price movements in later years are shown in juxtaposition with storage movements, but there is no discussion of general price influences other than storage, together with its reactions on consumption. The following quotation contains the general conclusion with reference to the steadying influence of storage: ". . . the contention of the cold-storage interests that cold storage has counted for uniformity of prices is largely true, but it is not true for all commodities, nor for all comparisons of years and periods" (p. 69).

The discussion of figures is too detailed for reproduction even in

part; it has to do more largely with method than with conclusions. On the whole, the bulletin is to be regarded as a compilation of material and as such is valuable.

The final paragraph of bulletin 93 contains its conclusion and reflects perhaps the viewpoint of both bulletins. It is as follows:

The validity and significance of the conclusions of this bulletin would gain nothing by any characterization that might be given to them. The facts speak for themselves. The reader must be aware that this investigation has negated some popular misconceptions with regard to the cold-storage business and has substantially sustained some of the assertions made by cold-storage warehousemen.

The author acknowledges indebtedness to Mr. F. G. Urner of the Urner-Barry Co., and to Mr. F. A. Horner of the Merchants Refrigerating Co. for material and important counsel.

W. E. HOTCHKISS.

In "Farmers' Bulletin" No. 560 of the United States Department of Agriculture (Oct. 11, 1913), several pages are devoted to "The Outlook for Meat Production" (pp. 17-20). It is believed that there are no large foreign supplies available for this country.

Among recent volumes issued by the Department of Commerce are *Commercial Relations of the United States, 1911* (Washington, 1913, pp. 185), a departure in form from the bulky two-volume edition; *Shoe and Leather Trade in Belgium, Spain and Egypt*, by A. B. Butman (Washington, 1913, Special Agents Series, No. 73, pp. 34); *Foreign Markets for Railway Supplies and Equipment* (Washington, July 25, 1913, Special Consular Report No. 60, pp. 224); *Transportation Rates to the West Coast of South America*, by F. J. Sheridan (Washington, 1913, Special Agents Series, No. 72, pp. 99). The last contains data in regard to lighterage, transfer, and other charges at New York and South American ports, the cost of marine insurance, consular fees, distances, and competitive rates from European ports and New York to South America.

At the last session of the Sixty-second Congress, a brief report on *Carey Act Projects* was presented, describing the history and present condition of the enterprises under way. This is the third and final report of the committee. (Sen. Doc. No. 1097, 62 Cong., 3 Sess., Feb. 21, 1913, pp. 22.)

Of international interest is the report on *Production and Marketing of Egyptian Cotton*, by J. S. Williams and Clarence Ousley, made to the American Commission to Investigate and Study Agricultural Credit and Coöperation (Sen. Doc. No. 113, 63 Cong., 1 Sess., June 26, 1913, pp. 10),

Of economic significance, though local in its application, is *A Report of Progress in Soil Fertility Investigations*, by J. G. Hutton, published by the South Dakota Agricultural Experiment Station (Brookings, South Dakota, June, 1913, pp. 235-264).

There is also to be noted *The Illinois System of Permanent Fertility*, by Cyril G. Hopkins, published by the Agricultural Experiment Station of the University of Illinois (Urbana, Illinois, Circular No. 167, May, 1913, pp. 20).

The State Board of Land Commission of Utah has made a new compilation of *State Land Laws, The Carey Land Act, State Laws Accepting Same, and Rules and Regulations Thereon* (William J. Lynch, secretary, Salt Lake City, pp. 85).

The results of two special studies in marketing have been received: *The Organization of a Fruit Distributing System*, by J. Arthur Reed (Salt Lake City, Utah Agricultural Experiment Station, Extension Division, Circular No. 11, pp. 123-136); and *Technical Studies in Egg-Marketing*, by C. W. Thompson (St. Paul, University of Minnesota Agricultural Experiment Station, Bulletin 132, April, 1913, pp. 45). Mr. Reed gives an account of the experience of the California Fruit Growers' Exchange. The question of cold storage is discussed in Professor Thompson's study.

The Department of Social Economics of the London Municipal Society has issued *Notes on the Census of Production (1907)*, in its series of "Statistical and other Memoranda for Political and Social Questions of the Day" (London, 33 Tothill Street, Westminster, S. W., Feb. 1, 1913, pp. 12). The analysis comments upon the low output per head; and, in the light of the statistics afforded, criticism is made of certain claims of socialists in regard to the distribution of wealth.

Corporations

THE STANLEY COMMITTEE REPORT ON THE UNITED STATES STEEL CORPORATION. The report is made up (1) of evidence taken by the committee in the course of its examination of witnesses and reports of its special agents, and (2) of reprints of various investigations previously made by independent officers and organizations and a number of documents given here as exhibits (*Hearings before the Committee on Investigation of United States Steel Corporation*, House of Representatives, 1911-1912, Nos. 1-63, pp. 5594: appendixes, xxiv, 422; xviii, 144; conclusions, 250, 9, 96; index, xlviii). The report of F. J. MacRae, special investigator for the committee, covers some 1100 pages. This includes summaries of earnings, minutes of the

board of directors, executive committee, finance committee, auditors, general managers of sales, traffic association, boards of directors of the various Carnegie companies and other corporations with related interests. It also includes statistical tables showing output and profits with forms of various contracts with coal companies. There is a list of abandoned plans with reasons for abandonment. There is a full index to MacRae's report under the headings: Subjects, Companies and Firms, and Individuals.

The so-called Stanley committee report will probably be more serviceable through its assembling what was already known more or less generally about the Steel Corporation than through what it found as the results of its own inquiries. MacRae's report has added documentary evidence in cases where knowledge was less exact, but the examination of witnesses by the committee has been rather disappointing. The men conducting it were not even reasonably well acquainted with the steel business and could not be expected to display much acuteness in getting new information, beyond details, especially in a field that had been worked over by investigators with some training. The final report of the majority is composed to a considerable degree of extracts from reports of previous investigators. Popularization is the chief result of the committee's work, perhaps its chief aim.

No investigation of "big business" seems to be complete without showing a connection with the Standard Oil Company. Hence there is placed in the record here the story of a transaction in ore lands between the Merritts and John D. Rockefeller. The incident was a closed one before the Steel Corporation was organized. The ostensible reason for its introduction, that it threw light on the problem of the value of ore deposits, is negligible. Moreover, the charges that misrepresentations were made to the Merritts by Mr. Rockefeller or his agents were withdrawn in a statement, dated January 22, 1897, and signed by the whole Merritt family, a score of them.

In view of the suit now in progress against the Steel Corporation any detailed discussion of its character and conduct would be premature and perhaps improper. The more rigorous examination by the court of the same data ought to put students in possession of better digested information than the Stanley Committee has given. Significant new material is not likely to be found at this date. We may now await an interpretation and a judgment.

In detail the report covers the following points: statistics from the reports of seven different railways; shipments, exports, domestic prices, properties purchased; the Interstate Commerce Commission on division of joint rates and other allowances to terminal railroads.

The tenth annual report of the corporation, for the fiscal year ending December 31, 1911, includes data as to annual percentages of production, prices, tonnage, assessed valuation, and rate of taxes on iron mines, and as to relations with other companies and with banks, insurance companies, telegraph companies, etc.

Following page 5594 is the *Report of the Commissioner of Corporations on The Steel Industry* (62 Cong., 3 Sess., H. R. No. 1127, pp. 212). With it are bound bills followed by agreements framed to protect and regulate trade, and Mr. Littleton's dissent from the bill presented by the majority together with his general views. Part II of this report contains the views of the minority. Part III consists of a supplementary report on the facts by H. O. Young and the separate views of Mr. Sterling.

In addition to MacRae's special index mentioned above, there is a good general index.

C. C. ARBUTHNOT.

THE SANATOGEN CASE. The decision of the Supreme Court in the Sanatogen case (229 U.S.) goes far toward reassuring those who feared that the privileges already enjoyed under the patent law would be further extended by judicial legislation. O'Donnell, a druggist in New York city, purchased sanatogen of one Hehmeyer, the agent and licensee of Bauer and Co. of Berlin, and sold the same at less than the established price. When this practice came to the notice of the said Hehmeyer, he refused to sell further to O'Donnell. The latter then purchased sanatogen of jobbers located in the District of Columbia and continued to sell at cut prices. Suit was then brought by Bauer and Co. and the Bauer Chemical Company against O'Donnell for the purpose of preventing O'Donnell from continuing to sell sanatogen at less than the price fixed by the patentees.

Sanatogen was sold to the trade in sealed packages, under letters patent No. 601, 995, bearing a notice of the established price and stating that any sale at a less price would constitute an infringement of the patent, and stating that persons so selling would be liable to injunction and damages.

In the prosecution of the case the plaintiff depended chiefly upon the case of *Henry v. Dick* (224 U.S.) referred to in the REVIEW of September, 1912 (vol. II, p. 720). The court, however, held that the case was dissimilar both from the legal and the economic point of view. In the first place, the article in question was sold—not licensed for use; and, second, the proprietors had no economic interest in sanatogen after its sale, whereas, the Dick Company relied for profits chiefly upon the sale of the articles necessary for efficient operation.

Continuing, the court held that the real question was whether in the exclusive right to vend there is also the right to dictate the price at which the article may be resold. Attention was called to the copyright law and the case of *Bobbs-Merrill v. Straus* (210 U.S. 839) in which the meaning of the word "vending" was considered. It was held that "vend" in the patent law and "vending" in the copyright law were one and the same in meaning, and that while Congress granted the exclusive right to sell in each case, there was no grant of the privilege of keeping up prices and preventing competition by notices restricting the price at which the article might be resold. Accordingly, as in the *Bobbs-Merrill* case, the court held that the right to the exclusive sale of an article did not confer the right to fix the price at subsequent sales.

It is significant, in view of the fears sometimes expressed that the domain of monopoly is likely to be enlarged through a too liberal interpretation of the patent law, to note that the court stated that while the act should be fairly or even liberally construed in order to secure its beneficent effects, "care should be taken not to extend by judicial construction the rights and privileges which it was the purpose of Congress to bestow."

MAURICE H. ROBINSON.

Part III of the *Report of the Commissioner of Corporations on the Steel Industry*, devoted to a consideration of cost of production, and representing the full report of the Bureau of Corporations, appeared under date of May 6, 1913 (Washington, pp. 569). This is probably the most intensive accounting study that has yet been made of an important industry.

In the *REVIEW* for June, 1913 (vol. III, p. 454), note was made of the report of the Senate Committee on Interstate Commerce. Since that date there has appeared the two-volume edition of the report, with hearings, digest, and index (pp. xxv, 2954). The digest (pp. 2804-2935) of testimony, with page references to the full record, should prove helpful to students of the trust problem.

An Address to the Boston Chamber of Commerce, by Howard Elliott, the new chief executive officer of the New York, New Haven and Hartford Railroad, September 30, 1913, is of interest as not only describing a great railroad system, but as showing the changing point of view of railway managers in matters involving public control.

Bulletin 14 of the Railway Business Association is entitled *Railway Income Still under 1910* (30 Church St., New York, Sept. 3, 1913, pp. 15).

A committee on railway mail pay, representing 264 railway companies has issued *The Railroads' Appeal for Fair Payment for Carrying the People's Mail* (Ralph Peters, president of Long Island Railroad, Aug. 1, 1913, pp. 8).

The Rehabilitation of the Santa Fe Railroad System, by Charles S. Glead, has been reprinted from the "Santa Fe Employees' Magazine" (pp. 26). It is an interesting historical narrative.

In connection with the current movement on the part of the railroads to secure an advance in rates is to be noted an address by B. A. Worthington, president of the Chicago and Alton Railroad, delivered September 23, 1913, before the Central Manufacturing District Club (pp. 21); and also a pamphlet entitled "*Commerce Commission's Patriotic Duty*," an Editorial from the *Philadelphia Public Ledger* May 4, 1913, and an Article by Daniel Willard, President of the *Baltimore & Ohio Railroad* (pp. 16).

The London Municipal Society has made an analysis of a recent paper of the British Board of Trade (No. 287 of 1913) on state operated railways, under the title *State Railways* (2 Bridge St., Westminster, S. W., Sept., 1913, pp. 19), which affords a convenient statistical summary of recent operations and finance in different countries.

The issue of September 9, 1913, of the "I. B. A. of A. Bulletin" (111 West Monroe St., Chicago) contains an abstract of the laws of each state relating to public service and railroad commissions. The report was prepared by George W. Kendrick III, of Philadelphia, chairman of the Committee on Public Service Corporations of the Investment Bankers' Association of America.

Additional record of the Haverhill Gas Case in Massachusetts is to be found in the *Twenty-Eighth Annual Report of the Board of Gas and Electric Light Commissioners*, for 1912 (Boston, 1913, pp. 284, 432; see pp. 41-60).

Other reports of public service commissions recently published are *Sixth Annual Report of the Public Service Commission, Second District, New York, for 1912* (Albany, 1913, Vol. 1, pp. 1020; Vol. 2, *Abstracts of Reports*, pp. 412); *Forty-Second Annual Report of the Railroad and Warehouse Commission of Illinois*, for 1912 (Springfield, 1913, 2 vols., pp. 673, 531); *Twenty-Eighth Annual Report of the Railroad and Warehouse Commission of Minnesota*, for 1912 (Minneapolis, 1913, pp. 789).

The Public Service Commission of New York for the First District

has issued a pamphlet entitled *New Subways for New York. The Dual System of Rapid Transit* (June, 1913, pp. 83), in which the scope of the new contracts is described.

The determination of the reasonableness of gas rates charged by a public service gas company is reported upon at length in the *Third Annual Report of the Board of Public Utility Commissioners of New Jersey* for 1912 (Trenton, 1913, pp. 504; see pp. 246-310).

Note should have been made in an earlier issue of *Rates of Public Utilities in Wisconsin, Part I, Electric Rates, A Compilation of Rates in Force June 1, 1912* (Madison, 1912, pp. 234). Rates are given by towns for each specialized form of service.

On October 10, before a committee of the Chicago City Council, Mr. E. W. Bemis argued against accepting going value as a basis for fixing rates.

Mr. David J. Lewis, representative from Maryland, who has been so active in securing the establishment of a parcel post, has published as a public document *Brief for a General Parcel Post* (Washington, 1913, pp. 58). This contains statistical analyses and charts.

The Investment Bankers' Association of America has been engaged during the past year in making a vigorous campaign in behalf of wise supervision of the sale of securities, in place of the radical "blue sky" legislation which is proposed in some states. Among the publications for which this association is responsible are to be noted the "I. B. A. of A. Bulletin" for April 26, July 7 and 29, 1913 (111 West Monroe St., Chicago), containing the text of "blue sky" law in different states; the *Draft of a Bill to Regulate the Sale of Securities and a Discussion of the Measure* (pp. 14); "*Blue Sky*" *Legislation in Massachusetts*, a memorandum prepared by Ropes, Gray and Gorham (March, 1913, pp. 10); *Bill of Complaint Filed in the United States District Court at Detroit, Michigan, to Test the Michigan Blue Sky Law* (pp. 39); and a *Bill of Complaint Brought before the United States District Court of the Southern District of Iowa*, by William R. Compton Co., etc. *vs. W. S. Allen, etc.*, filed September 5, 1913, to test the Iowa "blue sky" law (pp. 40). Copies of these pamphlets may be had upon application to W. H. Lyon, assistant counsel, 141 Broadway, New York.

Labor

WOMAN AND CHILD WAGE-EARNERS IN THE UNITED STATES.¹ The publication of volumes XIV, XVIII, and XIX completes the federal

¹ See AMERICAN ECONOMIC REVIEW, vol. II, p. 436; vol. III, p. 195.

report on the condition of woman and child wage-earners in the United States.²

Volume XIV is a report of the causes of death among woman and child cotton-mill operatives, based on an inquiry concerning persons aged ten years and over who had died in certain cotton-manufacturing cities of the South and New England in the period 1905-1907. The Southern data proved too inaccurate to allow a fair comparison of all figures from the two regions, and the investigation is practically confined to Fall River, Manchester, and Pawtucket. A comparison of death-rates in selected groups and from various causes shows the hazard of female operatives to be greater than that of male operatives or of female non-operatives, especially from tuberculosis. "In the age groups, 15-24, 25-34, and 35-44, the death-rates [of women operatives] from tuberculosis were respectively two and one quarter, two and one half, and five times those among women of the same age groups outside the cotton industry" (XIV, 32). Operative work appears extremely harmful to married women, their death-rate from all causes being strikingly higher than that of single operatives, and their hazard from child-birth double that of non-operative women.

Volume XVIII contains reports on 23 manufactures,³ in 17 states, concerning the employment of women and children. The survey covered 442 establishments employing 112,450 workers, 56.9 per cent of whom were women and children under sixteen. Children were 7.1 per cent of the whole groups, but a smaller proportion in 13 industries.

² *Report on the Condition of Woman and Child Wage-Earners in the United States* (61 Cong., 2 Sess., Sen. Doc. No. 645, 1912-1913), prepared under the direction of CHARLES P. NEILL and under the immediate direction and supervision of CHARLES K. VERRILL. XIV, *Causes of death among woman and child cotton-mill operatives*, by ARTHUR R. PERRY, 1912, pp. 430; XVIII, *Employment of women and children in selected industries*, 1913, pp. 531; XIX, *Labor laws and factory conditions*, 1912, pp. 1125.

³ Canning and preserving, fruits and vegetables	Hosiery and knit goods
Canning and preserving, oysters	Jewelry
Cans and boxes, tin	Needles and pins
Cigar boxes	Nuts, bolts and screws
Cigarettes	Paper boxes
Cigars	Pottery
Clocks and watches	Rubber and elastic goods
Confectionery	Skirts, overalls and underwear
Core making	Stamped and enamelled ware
Corsets	Tobacco (smoking and chewing) and snuff
Crackers and biscuits	Woolen and worsted goods
Hardware and metal specialties	

Women formed 8.6 per cent to 84.7 per cent of the employees in the several industries, and were typically one half or more of the working force. The occupations within each industry are described, and the sex, age, race, and conjugal condition of employees, their hours and other conditions of work are reported for the establishments visited. The hours and earnings stated are those of a working week, usually the week preceding the inquiry, and consequently are not always typical. They often show a wage above the average, as is noted in the reports on various industries (XVIII, 276, *passim*). Nevertheless, the wage-level recorded is appallingly low. "Of the 38,182 women, all 18 years and over, for whom the facts as to age and earnings were gained, one eighth earned under \$4, and two fifths under \$6, during the week studied. Practically only one tenth reached or passed \$10" (XVIII, 28). Remarkable local variations appeared in wages and general working conditions. Hours, safety provisions, sanitation, "these and many other points depend, not upon the worker, not even upon the industry, but very largely upon the attitude of the individual employer. . . . And when it comes to the question of wages, the lack of standardization seems to have reached its height" (XVIII, 35).

Volume XIX reports upon the administration and operation of state labor laws. It is limited to 17 states and to laws applying to factories and workshops. Reference to printed statutes and judicial decisions has been supplemented by interviews with enforcing agents to learn their interpretation of obscure laws and of laws allowing them large discretionary powers. Actual working conditions were studied in 563 establishments representing 58 industries. The laws and conditions reported are those in force at the time of the field work, December, 1908 to April, 1909, with footnotes, quoting important laws enacted up to January 1, 1910. Appendixes contain laws in force January 1, 1912, concerning women's and children's employment and the regulation and inspection of factories and workshops.

EMILIE LOUISE WELLS.

Vassar College.

MINNESOTA COMPENSATION LAW, 1913. Minnesota has enacted a quasi-voluntary compensation law (*Laws, 1913*, ch. 467). For employers to whom the compensation feature of the law applies and who do not accept it, the defenses of assumed risk and fellow servant are abolished, and contributory negligence is supplanted by willful negligence. Willful negligence, furthermore, is made a question for the jury and the burden of proof is placed on the employer. The old defenses hold if the employer accepts the compensation law and his

workers do not. Interstate employees, domestic servants, farm laborers, and casual employees not working in the line of the employer's business or occupation do not come under this compensation law. Voluntary agreement to the law between employer and worker is assumed, unless notice is given to the contrary. Self-inflicted injury and intoxication as a cause of injury are bars to the recovery of compensation, but the burden of proof is on the employer.

The schedule of compensation to injured workers is as follows: Temporary total disability, 50 per cent of wages with a maximum of \$10 and a minimum of \$6 a week, and a time limit of 300 weeks; if wages are under \$6 a week, the full amount of wage is payable. Temporary partial disability, 50 per cent of loss of earning power with the same 300-week limit. Permanent partial disability, on extent of that disability, according to a definite schedule, for example: loss of thumb, 50 per cent of wages for 60 weeks; index finger, 60 per cent for 35 weeks; second finger, 50 per cent for 30 weeks, and so on. The limits of \$10 and \$6 a week hold for permanent partial disability and for permanent total disability. Permanent total disability is defined as loss of both hands, both arms, both feet, both legs, both eyes, or any two of these members or organs, total loss of mental faculties, or total paralysis of both legs or both arms. Here a time limit of 400 weeks' compensation is fixed.

Compensation to dependents is as follows: The widow is to receive 35 per cent of deceased's monthly wages, and for one child 5 per cent additional. Two or three children bring in 15 per cent, making with the widow's 35 per cent a total of 50 per cent. Four or more children are entitled to 25 per cent, making in such cases a total of 60 per cent payable to the widow. The \$6 and \$10 a week limits, the 100 per cent provision of wages under \$6 a week, and the 300-week limit hold here also. A widow remarrying will receive in a lump sum half of the compensation still to be paid unless she has children, in which case the balance of her compensation will go to them. Orphans without parents are to be compensated as follows: 40 per cent for one orphan, 10 per cent for the second orphan, 10 per cent for a third, or a maximum of 60 per cent. A dependent husband is to get 25 per cent; a parent, 25 per cent; two parents, 35 per cent; a dependent brother, sister, or grandparent, 25 per cent; two such relatives, 30 per cent.

In cases of no dependents the following are payable: expenses of last illness, burial expenses up to \$100, medical and surgical treatment, and the necessary devices and medicines to be supplied by employer in all cases of injury for up to 90 days and with a \$100 limit, except that the court may allow an additional \$100.

Except as to medical and surgical treatment, no compensation is paid in the first two weeks after injury. The employer should be notified of accident within 14 days, but 30 days is allowed unless the employer can show that delay has been prejudicial to him, and 90 days if the worker can show that the delay was due to mistake, ignorance, or inability upon his part, or fraud upon the part of the employer. Disputes are to go to the district court. Commutation to lump sum payments can be made with approval of the court where payment is for death, for permanent total disability, or for permanent partial disability. If compensation runs over 6 months, readjustments may be made.

RAYMOND V. PHELAN.

University of Minnesota.

MINNESOTA MINIMUM WAGE LAW, 1918. The persistent work of Dr. John A. Ryan and others in Minnesota for a minimum wage law has been rewarded in the enactment of chapter 547, *Laws, 1918*. The law provides for a commission to be made up of the state commissioner of labor, an employer of woman labor, and a woman who is to be the salaried executive officer of the commission. The state commissioner of labor, Hon. W. E. Houk, is the chairman of this commission, A. H. Lindeke, of Lindeke, Warner & Sons, a wholesale dry goods house of St. Paul, is the employer member, and the executive officer and secretary is Eliza P. Evans, a Minneapolis lawyer, trained in social economics at the University of Minnesota.

A living wage is defined by the law as being sufficient to maintain the worker in health and to supply him or her with the necessary comforts and conditions of reasonable life. The commission is to investigate the wages of women and minors at its own discretion, or upon the request of 100 persons in any occupation employing "women and minors." (It would perhaps be better if it were "women or minors.") Employers are required to keep a register showing the name, address, wages, and hours of each woman and minor employed. There is no provision, however, whereby these registers must be sworn to unless they are brought into a wage hearing. Furthermore, some contend that these registers should be open to the inspection of organizations working for better labor conditions. The law gives the usual powers to hold hearings, subpoena witnesses, administer oaths, and exact testimony and evidence.

When the commission is satisfied that one sixth of the women or minors in an occupation are receiving less than living wages, it may establish a legal minimum for that occupation. Wages are to be

determined for women and minors of ordinary ability, and also for learners and apprentices. An established wage may rule throughout the state or within a restricted area only. There may be special wage rates, by licenses, for women physically defective; but women of this class shall not exceed one tenth of the whole number of workers in any establishment. Penalties of from \$10 to \$50 or 10 to 60 days are to be imposed for violation of the decrees of the commission. Discrimination against an employee who testifies is prohibited. The difference between legally minimum wages and wages actually received is made recoverable by suit together with attorney's fees and costs.

Provision is made for an advisory board in every occupation. These boards, to serve without pay, are to be constituted of three to ten persons, representing employers, an equal number representing workers, and one or more disinterested persons (not to exceed the number of representatives of either of the other parties). At least one fifth of any board shall be women and at least one representative of the public shall be a woman. The commission is to make rules and regulations governing the selection of members and the procedure of the advisory boards, which have equal powers with the commission in obtaining data in regard to wages and standards of living. By a majority vote an advisory board may recommend wage rates, to be reviewed and passed upon by the commission.

RAYMOND V. PHELAN.

A minute and special study of *Wages and Hours of Labor in the Lumber, Millwork and Furniture Industries, 1890 to 1912*, has been made by the federal Bureau of Labor Statistics under the direction of Fred C. Croxton (Washington, Aug. 14, 1913, pp. 178). The increase of wages between 1890 and 1912, per hour, is found to be 29 per cent. The bureau is to be commended in thus undertaking to analyze wages intensively for separate industries.

A more comprehensive report by the same bureau is *Union Scale of Wages and Hours of Labor 1907 to 1912* (Aug. 15, 1913, pp. 121). This covers 40 trades in 39 industrial cities. In certain trades wages are shown back to 1890.

Employers Welfare Work is the subject of bulletin 123 of the United States Bureau of Labor (Washington, May 15, 1913, pp. 80), prepared by Elizabeth L. Otey. Studies are made of some 50 establishments in about a dozen representative lines of industry.

The United States Bureau of Labor Statistics is publishing a separate series of studies in regard to the employment of women in industry.

No. 2 of this series is entitled *Working Hours of Women in the Pea Canneries of Wisconsin* (May 5, 1913, pp. 54); and No. 8, *Employment of Women in Power Laundries in Milwaukee* (May 15, 1913, pp. 92). Each of the studies was made by Marie L. Obenauer.

The bureau has also published *Wages and Hours of Labor in the Cotton, Woollen, and Silk Industries, 1890 to 1912* (Aug. 14, 1913, pp. 206); *Ten-Hour Maximum Working-Day for Women and Young Persons* (No. 118, Apr. 10, 1913, pp. 71); and *Prohibition of Night Work of Young Persons*, No. 117, Apr. 10, 1913, pp. 74.

The Bureau of Mines has recently published a pamphlet on *Sanitation at Mining Villages in the Birmingham District, Alabama*, by Dwight E. Woodbridge (Washington, Department of the Interior, 1913, pp. 27). As a result of improvements during the past few years there has been an increased efficiency of workmen.

The *Report of the Special Commission to Investigate the Conditions of Wage-Earning Women and Minors in the State, 1913*, represents an investigation ordered by the legislature of Connecticut in 1911 (Hartford, 1913, pp. 297). Owing to lack of adequate opportunity the inquiry was limited to the textile, corsets, and metal trades; 50 factories were investigated in 14 localities; wage data were collected from 9103 women.

Dr. C. C. Williamson has prepared for the New York Public Library a bibliography on *The Minimum Wage. A Preliminary List of Selected References* (New York, 1913, pp. 9). Suggestions of additional titles are invited.

The British Board of Trade has published the eighth volume of the *Report of an Enquiry into the Earnings and Hours of Labour of Work-people in the United Kingdom* (London: Wyman, 1913, pp. xxxv, 298). For earlier issues see REVIEW, volume II, page 446. This volume covers some 40 different industries, including the paper, printing, pottery, brick, glass, chemical, tobacco, and food trades.

In 1912 the Commonwealth Bureau of Census and Statistics of Australia began the publication of labor statistics. Two volumes were published by the Labour and Industrial Branch; *Prices, Price Indexes and Cost of Living in Australia* (Dec., 1912) and *Trade Unions, Unemployment, Wages and Cost of Living* (April, 1913). In May of this year it began the issue of a quarterly "Labour Bulletin." No. 2 (August, 1913) contains an abstract of the laws of the several Australian states on workmen's compensation (pp. 132-138).

Bulletin 111 of the Bureau of Labor is a review of *Labor Legislation of 1912*, by Lindley D. Clark (Washington, Dec. 13, 1912, pp. 268). This is the fourth annual review of labor legislation made by the bureau. A useful table shows the principal features of laws relative to workmen's compensation and insurance, in which specific references are given to statutes. Fifteen states shared in this legislation. The bulk of the bulletin is made up of copies of laws, preceded, however, by a topical analysis. There is also a cumulative index of previous bulletins dealing with legislation, and decisions relating thereto.

The Federal Bureau of Labor Statistics has reprinted with an explanatory introduction the *Report of the Industrial Council of the British Board of Trade on its Inquiry into Hospital Agreements* (Aug. 18, 1913, pp. 41).

Bulletin No. 2 of the Nebraska Legislative Reference Bureau contains the *Preliminary Report; Employers' Liability and Workman's Compensation Commission* (Lincoln, Dec. 20, 1912, pp. 48). Tables are given showing "court business from personal injury cases." In 95 cases reported upon, \$29,666 was given in judgments for the plaintiff.

Mr. I. N. Day has made a *Compilation of Opinions and Decisions upon the Subject of Employers' Liability and Workmen's Compensation, together with Statistics and Legislation Applicable Thereto* (Portland, Oregon, 1913, pp. 92). There are chapters on common law rules, opinions of publicists, and remedial legislation.

There is also to be noted the *Report of the Missouri Commission on Employers' Liability and Workmen's Compensation* (Jefferson City, Jan., 1913, pp. 145). This is largely made up of testimony at hearings.

The Industrial Accident Board of California has published a pamphlet on *Reports of Cases* determined in 1912 (Sacramento, 1913, pp. 58).

The subject of arbitration is also treated in a report of the Committee on Interstate Commerce, *Mediation, Conciliation, and Arbitration in Controversies between Railway Employees and their Employers* (Sen. Rep. No. 72, 63 Cong., 1 Sess., July 10, 1913, pp. 100). The report occupies but two pages followed by the hearings.

The Bureau of Statistics of Massachusetts has published in advance, part II of its annual report for 1912, entitled *Labor Bibliography 1912* (Boston, State House, July 15, 1913, pp. 71). Books and periodical titles are grouped under 30 sections.

The Bureau of Labor and Statistics of Arkansas has recently issued *The Compiled Labor Laws of the State of Arkansas* (1913, pp. 64).

The Bulletin of the Industrial Commission of Wisconsin for May 20, 1913, contains a historical account of the operations of the *Wisconsin Free Employment Offices* (Madison, 1913, pp. 193-238).

Money, Prices, Credit, and Banking

THE REVISION OF THE CANADIAN BANK ACT. The Canadian bank act, as is well known, is subject to decennial revision. The last revision was due to take place in 1910; but owing to circumstances which it is not necessary here to describe, it was not until the present year that the work was finally undertaken. The leading features of the Canadian banking system are so well known that they may be passed over, and the nature and causes of the recent changes in the act alone described. There were many minor modifications, but the essential changes effected were: (1) provision for a shareholders' audit, (2) the creation of central gold reserves, and (3) the providing of additional facilities for making loans to farmers.

In the recent revision of the act the public was most deeply concerned with the problem of securing an adequate system of bank inspection. The immediate reason for this was the disastrous failure of the Farmers' Bank. This institution had gambled away its resources on the Keeley mine; and had, in its failure, brought many farmers as well as others to the verge of ruin. For several years previous, however, there had been an insistent demand for some sort of external bank inspection, the principal advocate of the change being Mr. H. C. McLeod, late general manager of the Bank of Nova Scotia. In response to this demand several banks of their own accord had established a shareholder's audit to supplement the ordinary system of internal examination.

The banks as a whole have been opposed to any change in the method of inspection. The reason they advance is that the keynote of the organization of Canadian banks has always been the centralization of responsibility; and they do not think it wise to divide that responsibility with any outside authority. In accordance with this belief they have hitherto depended, and will continue to depend, upon their own officers to safeguard their own interests as well as those of the public. Inspectors appointed by the general manager visit the branches at irregular intervals, and make a thorough examination of the books, and the nature of the collateral held. These men are thoroughly competent, have had years of banking experience, and

are in receipt of large salaries. They are experts who perform their work with a deep sense of the responsibilities involved.

In addition to this, each large branch bank is in daily communication with the head office, either by wire or by letter. Branch banks are obliged to conduct their business in conformity with certain regulations. They must furnish weekly accounts to the head office of all loans and discounts; and at the end of each month a detailed statement of resources and liabilities, together with a description of all collateral security held. The board of directors at the head office is consulted on all important business. Even the general manager is subject to some oversight by a special representative of the directors; he is responsible to them alone; and while he is given certain routine duties to perform, his main business is to keep the directors informed of important developments.

A concrete example of the nature and cost of the work of inspection of a Canadian bank may be seen by examining the methods followed in the Canadian Bank of Commerce in 1912. That institution had 370 branches to be inspected. There were employed, for that purpose, 14 officers of the highest grade, whose salaries amounted to \$46,000. In addition, there were engaged upon the work a large number of ordinary audit officers and assistants at salaries amounting to \$14,800. The services of clerks, messengers, and stenographers cost \$8,000; traveling expenses amounted to \$23,000; and charges for rent, light, stationery, etc., to \$13,000, making a total of \$102,762 for one inspection of this bank. The head office, as well as each branch, was also inspected.

As far as the public is concerned, however, it has no means of judging of the soundness of a bank except by examining the monthly returns which are required by law from each bank. These returns are fairly comprehensive, and have been made more so by the revision of the act this year. The minister of finance may call for supplementary information from any bank, whenever, in his judgment, such data are required to afford a fuller knowledge of a bank's affairs. Of course, these returns can be taken only for what they are worth. In the case of several failed banks the returns were made with every degree of falsification, because no independent checking of the figures was possible.

Since confederation (1867), there have been a number of disastrous bank failures in Canada. The worst failures were those of the Exchange Bank, the Ontario Bank, the Sovereign Bank, and the Farmers' Bank. Canadian bankers have insisted, however, that the collapse of the Ontario Bank and the Sovereign Bank cannot be taken as actual

failures. The Ontario Bank was taken over by the Bank of Montreal and liquidated by that institution. The Sovereign was absorbed by a group of banks which divided its offices among them. The object in each case was chiefly to prevent a general panic. The mere placing of the words "Bank of Montreal" on the banking houses of the defunct Ontario Bank stopped the run which had begun on that institution. The Farmers' Bank, however, was left to its fate. Leading bankers had on more than one occasion opposed the granting of a charter to that bank; and the sudden collapse of its career of high finance occasioned no surprise to the bankers of the country.

Since confederation, eleven banks have failed in Canada; but it must be remembered that not all of these could have been chartered under the present act. The true perspective, moreover, cannot be secured by reference to mere numbers. The proper method is to compare the total assets of the banks that have failed since confederation, with the total assets of the banks as they exist at the present time. This is obviously the correct method to follow; for Canada possesses few banks—only twenty-four in 1913—and therefore a reference to mere numbers gives a grotesque view of the situation. The following figures may prove useful in making the situation clear:

1. Total assets of Canadian banks which have failed since confederation	\$77,780,419
2. Total assets of Canadian banks as on December 31, 1912....	1,526,081,158
3. Total liabilities to the public of Canadian banks as on December 31, 1912	1,292,451,137
4. Total losses by creditors (excluding shareholders) from bank failures since confederation	6,090,357
5. Total losses by creditors through failures of banks which could have been organized under the present bank act	2,176,966

Nevertheless, in obedience to the strong demand for some sort of independent bank examination, provision was made in the recent revision of the act for a shareholders' audit of each bank's affairs. The auditors are to be chosen by the shareholders from a list of 40 names selected by the whole body of the general managers of the banks. The list must be submitted to the minister of finance for his approval. If one third of the shareholders of a bank are dissatisfied with the auditor appointed by the majority, they may appeal to the minister for the appointment of another auditor.

The auditors must examine the books and accounts, cash, securities, documents and vouchers of the head office of the bank. They are empowered, moreover, to require from the directors and officers of the bank such information as may be necessary for the proper perform-

ance of their duties. They are given access to the returns of the branch banks to the head office; and they may, at their discretion, visit any branch or agency for the purpose of examining its books and accounts. The auditors must submit a statement of their findings to the shareholders at the annual meeting, or on any other occasion the necessity may require. In addition the minister of finance may require a special return to be made to him, the cost of the service rendered being paid for by the government.

Canadians would be wise not to expect too much from this system of external examination. After all, it can do no more than verify a bank's statements and books. It cannot guarantee the quality of the assets held, which is the matter of paramount importance; neither can it safeguard loans which are approved of by the directors. In every large undertaking, the soundness of the transaction must depend, as before, upon the judgment of the general manager and the board of directors.

The establishment of central gold reserves is the most important feature added to Canada's banking system by the legislation of 1913. As is well known, the banks under the old act were able to issue notes to the amount of their unimpaired paid-up capital; and from September 1 to the end of the following February—that is, during the period of moving the crops—an additional amount equal to 15 per cent of their combined capital and surplus. Under the new act each bank may issue any amount of notes that it may desire, provided that it deposits with a board of trustees, at Montreal, gold or Dominion notes to the full amount of the notes issued. These notes are to be identical in form with the ordinary notes of the bank. The gold or Dominion notes deposited with the trustees shall be returned to the bank whenever the notes which the bank has outstanding do not amount to the paid-up capital of the bank together with the amount of legal tender money deposited with the trustees. In other words, the banks can still issue their notes up to the full amount of their paid-up capital, and an additional amount from September 1 to the end of the following February, which, as has been explained, may equal 15 per cent of a bank's combined capital and surplus. It is only for notes issued in excess of these amounts that legal tender money must be deposited with the trustees at Montreal. It should be observed, however, that the banks pay a tax of 4 per cent on the extra issue during the crop-moving period, whereas there is no tax upon gold-reserve notes. And as Canadian banks are not required to keep a legal reserve against their demand liabilities, there is no reason why the idle gold in their

reserves should not be sent to Montreal to form the basis of new note issues, especially when it is considered that the gold may be recalled at once when no longer needed to cover notes.

The Canadian Bankers' Association, with the approval of the minister of finance, appoints three members of the board of trustees, and the minister himself a fourth. The association is given power to make by-laws, rules and regulations, respecting the custody and management of the gold reserves.

The value of this new feature of the act will be clearly seen from a consideration of the following facts. According to the quarterly statement of April 30, 1913, the paid-up capital of the Canadian banks was \$115,799,217 and the rest (or surplus) \$108,414,337—a total of \$224,213,554. The emergency circulation, therefore, of the autumn and winter might, had it been necessary, have reached 15 per cent of this sum, about \$33,000,000. In November, 1912, the emergency circulation actually approached \$10,000,000; and the margin available at that time was, therefore, \$20,000,000. Ordinarily that margin would be ample; but circumstances might easily arise where such a margin would be wiped out. In times of stress, a comparatively insignificant action may start a run on a bank. At the end of April, 1913, the deposits payable on demand in Canada were \$365,340,002, and those payable after notice \$631,160,280, a total of \$996,500,282. In November, 1912—a month when the pressure is usually greatest—the deposits were \$16,000,000 higher. To meet a run on such a large amount, a good deal more than \$20,000,000 might be needed. It should here be explained that the deposits payable "after notice" are practically demand deposits in Canada. The new provision does much to economize time, and to bring prompt relief in a dangerous situation. By pooling their gold holdings in a central reserve the banks can immediately receive additional circulation in the form of notes, and still retain control of the gold. The banks can always keep an amount of their own notes on hand to be used for such a purpose. True, the banks can secure Dominion notes in exchange for gold; but it always takes time to get governmental machinery in motion. Moreover, in that case the banks part with their gold; whereas, under the new scheme, the gold is merely concentrated in the reserves at Montreal. But not only for periods of stress, but under normal conditions, will the new provision be valuable. In June, 1912, the circulation of the banks was within \$2,000,000 of the authorized limit; and much anxiety was felt lest that limit be reached. The ability, therefore, to issue notes to any amount required, on a gold basis, will greatly strengthen the position of the banks.

The third important new feature in the revision of the act is the power given to the banks to make loans to farmers on grain which is stored on the farm and still in the farmer's possession. The Canadian banks, in addition to conducting the ordinary business of banking, have been permitted to assume very important functions in aiding the manufacturing and wholesale trade of the country. To such an extent is this true that in many cases they have been "silent partners" in Canadian industry. The permission granted them to loan money to farmers on stored grain in the latter's possession is an attempt to extend to the farmers aid similar to that hitherto granted to manufacturers and wholesalers alone. It should not be thought, however, that the banks have not always granted loans liberally to farmers. While they have refused to make advances of capital to the farmers to be invested in fixed forms (land and buildings), they have always provided money for working capital (machinery, tools, seed, etc.) at reasonable rates on fair security.

The possibility of making advances to the farmers on their grain is expected to be of especial benefit to the West. There, the farmer has been compelled to close his financial year about the first of November. The reason therefor is that the West is a big borrowing country; and to a large extent depends upon the storekeeper and the implement dealer for credit. Dealers in agricultural implements have made farmers' notes fall due about November 1, each year. The result is that the farmer has been obliged to throw his produce on the market in September and October, as soon as the grain is threshed, in order to secure the necessary funds to meet his obligations. This unfortunate state of affairs has helped to create a grain blockade each year. The grain thus thrown on the market in surplus amounts tends to lower prices, to the detriment of the farmer. It is hoped that, under the new legislation, the farmer will be able to hold his grain for higher prices; and in the meantime secure accommodation from the banks to meet his obligations. Many bankers, however, refuse to see any remedy for the situation in the new legislation. They maintain that it will involve too much risk to extend loans on grain over which the farmer continues to assert control. Only the operation of time will enable us to estimate the value of this feature of the act.

There are many other important features of the act which, owing to limits of space, cannot be discussed here, but must be reserved for a future article. The points considered, however, cover the principal new features of Canadian banking.

W. W. SWANSON.

Queen's University, Kingston.

The Library of Congress has issued a new *Select List of References on the Monetary Question*, compiled by H. H. B. Meyer and W. A. Slade (Washington, 1913, pp. 247). This, in a measure, takes the place of lists published in 1903 and 1908. The collection of a library for the National Monetary Commission gave opportunity for including many new titles, through the coöperation of Mr. Slade, formerly librarian of the National Monetary Commission. Titles are listed by countries and also under special topics, or crises, guaranty of bank deposits, clearing houses, and foreign exchange. There is also a 13-page author index and an 8-page subject index.

The hearings before the Senate Committee on Banking and Currency have been printed for the use of the committee. Up to October 20, 2,671 pages had been printed.

Among the numerous pamphlets called forth by the introduction of the currency bill are to be noted:

The Federal Reserve Act, containing in parallel columns the text of the act as introduced June 26, 1913, and text as amended and passed by the House, September 18 (Fourth National Bank, New York, pp. 44).

The Administration Currency Bill, by George M. Reynolds, an address before the Minnesota Bankers' Association, July 10, 1913 (Continental and Commercial National Bank, Chicago, pp. 22).

Reviewing Proposed Banking and Currency Bill, by James B. Forgan (First National Bank, Chicago, pp. 18).

A helpful study for students of the cost-of-living problem is *Sugar Prices, from Refiner to Consumer*, by N. C. Adams, published by the federal Bureau of Labor Statistics (Washington, Retail Prices and Cost of Living Series, No. 7, May 14, 1913, pp. 42). The study covers more particularly the years 1901, 1905, and 1910-1912. It is restricted to conditions in New York City, Pittsburgh, and Chicago.

With the *Bulletin of the National Federation of Remedial Loan Associations* for August, 1913, containing the "Proceedings of the Fifth Annual Convention, June 19-21, 1913," there is included a broadside showing the work of remedial loan associations for 1912-13 in statistical form (902 F St., N. W., Washington, D. C.).

On page xxvi of the *Annual Report of the Bank Commissioner of Massachusetts, 1912, Part II, Relating to Coöperative Banks, Savings and Loan Associations, and Credit Unions* (Boston, 1913) it is noted that 26 credit unions have been organized since the last of 1909. The growth is slow, owing largely to lack of information.

In the *Third Biennial Report of the Bank Commissioner of Oklahoma* (Oklahoma City, Dec. 15, 1912), reference is made to the operation of the guaranty law. In the two years covered by the report, emergency assessments were made amounting to $1\frac{3}{4}$ per cent on the average daily deposits of all banks. The experience of each bank which has failed is summarized.

The following reports of proceedings of annual conventions of state bankers' associations for 1912 have been received:

Twentieth Annual Convention of the Alabama Bankers' Association, Mobile, May 17-18, 1912 (McLane Tilton, Jr., secretary, First National Bank, Pell City, pp. 181).

Twenty-second Annual Convention of the Arkansas Bankers' Association, Little Rock, May 28-29, 1912 (Robert E. Wait, secretary, Little Rock, pp. 198).

Eighteenth Annual Convention of the California Bankers' Association, Long Beach, May 23-25, 1912 (Frederick H. Colburn, secretary, Savings Union Bank Bldg., San Francisco, pp. 56).

Thirteenth Annual Meeting of the Connecticut Bankers' Association, New London, June 18-19, 1912 (Charles E. Hoyt, secretary, South Norwalk, pp. 16).

Nineteenth Annual Session of the Florida Bankers' Association, Key West, April 4-5, 1912 (George R. DeSaussure, secretary, Jacksonville, pp. 58).

Twenty-first Annual Convention of the Georgia Bankers' Association, Atlantic Beach, Fla., May 24-25, 1912 (Haynes McFadden, secretary, Atlanta, pp. 156).

Eighth Annual Convention of the Idaho Bankers' Association, Coeur d'Alene, June 17-19, 1912 (E. H. Plowhead, secretary, Caldwell Commercial Bank, Caldwell, pp. 119).

Twenty-sixth Annual Convention of the Iowa Bankers' Association, Cedar Rapids, June 5-6, 1912 (Percy W. Hall, secretary, Des Moines, pp. 216).

Twenty-fifth Annual Convention of the Kansas Bankers' Association, Topeka, May 23-24, 1912 (W. W. Bowman, secretary, Topeka, pp. 209).

Convention Proceedings of the Louisiana Bankers' Association, Covington, April 26-27, 1912 (L. O. Broussard, secretary, Abbeville, pp. 96).

Twenty-third Annual Convention of the Minnesota Bankers' Association, St. Paul, June 14-15, 1912 (Charles R. Frost, secretary, Minneapolis, pp. 199).

Ninth Annual Convention of the New Jersey Bankers' Association, Atlantic City, May 3-4, 1912 (William J. Field, secretary, Commercial Trust Co., Jersey City, pp. 152).

Nineteenth Annual Convention of the New York State Bankers' Association, Buffalo, June 13-14, 1912 (William J. Henry, secretary, 11 Pine St., New York, pp. 262).

Tenth Annual Convention of the North Dakota Bankers' Association, Jamestown, June 19-20, 1912 (W. C. McFadden, secretary, Commercial Bank, Fargo, pp. 303).

Twenty-second Annual Convention of the Ohio Bankers' Association, Cedar Point, July 2-3, 1912 (S. B. Rankin, secretary, 805 Wyandotte Bldg., Columbus, pp. 202).

Eighteenth Annual Convention of the Pennsylvania Bankers' Association, Bedford Springs, June 18-19, 1912 (D. S. Kloss, secretary, First National Bank, Tyrone, pp. 214).

Twenty-first Annual Convention of the South Dakota Bankers' Association, Belle Fourche, June 26-27, 1912 (J. E. Platt, secretary, Security Bank, Clark, pp. 160).

Twenty-eighth Annual Convention of the Texas Bankers' Association, San Antonio, May 7-9, 1912 (J. W. Hoopes, secretary, Austin National Bank, Austin, pp. 131).

Third Annual Convention of the Vermont State Bankers' Association, Montpelier, Feb. 22, 1912 (C. S. Webster, secretary, Barton, pp. 60).

Nineteenth Annual Convention of the Virginia Bankers' Association, Old Point Comfort, June 20-22, 1912 (Walker Scott, secretary, Farmville, pp. 240).

Eighteenth Annual Convention of the Wisconsin Bankers' Association, Milwaukee, July 24-25, 1912 (George D. Bartlett, secretary, Milwaukee, pp. 278).

Public Finance

In *General Statistics of Cities: 1909*, to be distinguished from the annual series on *Financial Statistics of Cities*, published by the Bureau of the Census (Washington, 1913, pp. 197), data are given in regard to sewers, refuse disposal, street cleaning, and highways. A table on page 190 shows wages of city employees by specified classes. Of special service is the paragraph on page 15, indexing the years in which various branches of municipal service have been reported in this series of reports.

Relating to the income tax provision of the new tariff is *The Income*

Tax: Opinions of J. K. Shields, C. Hull, and T. M. Gordon (Sen. Doc. No. 171, 63 Cong., 1 Sess., Aug. 26, 1913, pp. 20).

Additional public documents relating to the recent tariff legislation are:

Report to Accompany H. R. 3321. A bill to reduce tariff duties, to provide revenue for the government and for other purposes, together with views of minority and statistical data (Washington, H. R. No. 5, 63 Cong., 1 Sess., 1913, pp. 814).

Tariff Handbook. Report on H. R. 3321, together with a comparative presentation of the text of the law of 1909, and H. R. 3321 as it passed the House and as the same was reported to the Senate. This contains statistical comparisons of imports, exports, rates of duties, and revenues for 1896, 1905, 1910 and 1912. It was prepared for the use of the Committee on Finance (Washington, 1913, pp. 484).

Tariff Schedules, Briefs and Statements Filed with the Committee on Finance, United States Senate, 63 Cong., 1 Sess., on H. R. 3321 (Washington, 1913, 3 vols., pp. 2309). Volume 1 deals with schedules A to H; volume 2 with schedules I to L, and volume 3 with schedules M and N, free list, customs administration and income tax. The last volume also contains a subject index. Briefs printed in the hearings before the House Committee on Ways and Means are not duplicated in this collection.

Tariff Schedules. Hearings before Sub-committee of the Committee on Finance (Washington, 1913, pp. 824).

Notes on Tariff Revision, 1913. An Analysis of the Tariff Bill as Passed by the House of Representatives, and as amended and reported to the Senate by the Senate Committee on Finance, with particular reference to the meaning and effect of the changes in phraseology and the new provisions introduced therein (Washington, 63 Cong., 1 Sess., Sen. Doc. No. 136, July 23, 1913, pp. 262).

Conference Report on H. 3321, to Reduce Tariff Duties and to Provide Revenue for Government (H. Rep. No. 86, Sept. 29, 1913, pp. 39).

Sugar at a Second Glance. An article on the influences of our high tariff on sugar, upon the ultimate price to consumers, and as affecting the high cost of living, By Frank C. Lowry (Sen. Doc. No. 23, 63 Cong., 1 Sess., May 6, 1913, pp. 106). In this, Mr. Lowry, secretary of a committee of wholesale grocers, makes a reply to *Sugar at a Glance*, by Truman G. Palmer, previously published as a Senate document.

Under date of April 7, 1913, the Tax Commission of Massachusetts issued a brief pamphlet in reference to a certain legislative inquiry

in regard to the amount of untaxed intangible property within the state and what steps could be taken to secure its taxation (H. Doc. 2290, pp. 9). From the returns made for the taxation of legacies and successions, it is estimated that the amount of personal property is $3\frac{1}{2}$ times the amount of real estate. This would give \$11,358,000,000 as the true valuation of all the personal property in the state. Allowing for one half as exempt under the law, it is contended that there is \$4,646,000,000 of intangible personalty which is not disclosed.

The Bureau of Statistics of Massachusetts has published as "Municipal Bulletin" No. 5, *Laws Relating to Municipal Finance* (July, 1918, pp. 44). Of importance is the new law relating to the borrowing of money.

In the *Fifth Annual Report on the Statistics of Municipal Finance of Massachusetts for 1910* (Boston, State House, Bureau of Statistics, 1918, pp. xxx, 263), Mr. Gettemy notes the steady progress in accounting reform.

The *Annual Report of the School Committee of Newton, Mass.*, for 1912, contains a report of Mr. F. E. Spaulding, superintendent of schools, in which an exhaustive analysis is made of the cost of public schools by different grades, with comparisons with other cities and towns in Massachusetts (pp. 151).

Mr. C. B. Fillebrown (77 Summer St., Boston) has for distribution *Thirty Years of Henry George* (pp. 15) in which the progress of taxation of land and the unearned increment is briefly summarized; and also *A 1914 Single Tax Catechism*, a twelfth revision (pp. 16).

The New York Tax Reform Association has issued *Tax Legislation of New York, 1913* (pp. 4), and *Tax Legislation and Pending Constitutional Amendments, 1913* (pp. 7). The latter is a summary of legislation in different states. (Bulletins Nos. 546 and 547, 29 Broadway, New York.)

Reprints have also been made by the same association of *Abolition of Personal Taxation*, an address presented to the First New York State Conference on Taxation in 1911, by Lawson Purdy; and of *Interstate Comity and Double Taxation*, an address before the Second Conference on Taxation in 1912, by David Rumsey.

Mayor Blankenburg of Philadelphia has published a pamphlet on *Real Estate and Its Taxation in Philadelphia*, prepared by Robert D. Dripps and Arthur E. Post. Proposals are made in regard to improvement in assessment of realty which is regarded as the "most depend-

able subject for permanent taxation." (Philadelphia, May 1, 1913, pp. 56.)

From the office of the attorney general of Minnesota has appeared an annotated reprint of the *Inheritance Tax Law of Minnesota* (Minneapolis, 1913, pp. 25). This contains brief historical notes.

The issue of August 29, 1913, of the "I. B. A. of A. Bulletin" (111 West Monroe St., Chicago, pp. 40) contains a report on the constitutionality of exempting securities from taxation or taxing them at a lower rate than tangible property in the various states. The report was prepared by W. H. Lyon, assistant counsel of the Investment Bankers Association of America. The laws of each state are briefly summarized.

Demography

A bulletin on *The Immigrant Population of Massachusetts*, part I of the *Annual Report on the Statistics of Labor for 1912 of the Massachusetts Bureau of Statistics* (Boston, April 30, 1913, pp. 90), consists of a re-publication of data relating to Massachusetts contained in three different federal sources, viz., the last annual report of the Commissioner General of Immigration, the 1910 census, and the report of the United States Immigration Commission. Of these, the latter supplies over two thirds of the matter of the bulletin.

The general results are not surprising, the facts being pretty well known. Massachusetts receives about 8 in 100 of the immigrant aliens; of the older groups of immigrants a larger proportion; of the newer groups a less proportion; those of Slavonic and Iberic origin making 68 per cent of total admissions, but only 40 per cent of Massachusetts admissions. South Italians, Poles, and Irish make up her largest quota, and of Portuguese she receives 52.8 per cent of all those arriving.

The census figures for birth and parentage are given for Massachusetts as a whole, in summary shape for all cities of 10,000, and more fully for Boston, Cambridge, Fall River, Lowell, and Worcester (not, however, by *wards*, though these figures are now available). The largest foreign-born groups in the state are the natives of Ireland, Canada (of whom the French element is less than half), and Russia. Until, however, the census figures of mother tongue are published there is no way of disentangling the latter most heterogeneous group of Jews, Poles, Finns, Lithuanians, Germans, Ruthenians, Russians, and others, though the immigration data show the proportions in which they are represented year by year among arrivals.

It is desirable that the federal immigration authorities should furnish the numbers not only of those destined to the state in general but of those destined to Boston and other chief cities. These data are extant, and if considered too detailed for federal publication they might well be furnished to the State Bureau of Statistics.

The figures of the Immigration Commission are, unfortunately, open to considerable criticism. In some cases conclusions are based on too few data, as, for instance, data (p. 33) as to naturalization among Poles (29 individuals investigated). Still worse, it is not always possible to judge, at any rate by immediate inspection, on what numerical basis a statement rests. Again, data drawn from selected cases are liable to represent not racial contrasts but to reflect the line of choice. In other cases a mountain of statistics produces a *ridiculus mus* of results; for instance, proof that immigrants under fourteen on arrival are more apt to know English than those older on arrival, and that those who have been longer in the country speak English more generally than those more recently come.

Perhaps the most surprising figures are those as to "charity seekers." Of over 1,000 new "charity organization cases" in Boston only 240 were foreign-born of the non-English-speaking groups (English-speaking foreign-born 380), while of the second generation (native born of foreign father) there were only 48 in all (as against 342 of the much smaller total of the native born of native father.) E. G. BALCH.

The Children's Bureau of the United States Department of Labor has issued a pamphlet on *Baby Saving Campaign*, representing a preliminary report on what American cities are doing to prevent infant mortality (Washington, Infant Mortality Series, No. 1, 1913, pp. 98).

This bureau has also made a convenient *Handbook of Federal Statistics of Children, Part 1*, which contains tables showing the number of children, with their sex, age, race, nativity, parentage, and geographic distribution (Washington, Bureau Pub., No. 5, 1913, pp. 99).

In the *Second Annual Report of the Bureau of Industries and Immigration of New York, for 1912*, of which Miss Frances A. Kellor is the directing head (95 Madison Avenue, New York, pp. 29), note is made of the widening interest in organized effort to deal with the needs of alien residents. Other states are following the lead of New York in establishing state immigration commissions.

The agitation for improved vital statistics is well illustrated in the pamphlet *The Registration of Vital Statistics a Good Business*, an address delivered before the Annual Conference of Health Officers of

Indiana May 13, 1913, by Lewis I. Dublin, Statistician of the Mutual Life Insurance Company of New York (pp. 16).

The Thirty-Third Annual Report of the Associated Charities of Boston for 1912 contains a brief study of the Slavs in South Boston (pp. 25-28).

The "Volta Review" has recently issued a four-page leaflet descriptive of a forthcoming publication on graphical studies of marriages of the deaf (35th St. and Volta Place, Washington).

Bulletin XV of the *Fifth Census* of Canada concerns the *Educational Status of the People* (Ottawa, June 10, 1913, pp. 8).

Bulletin XVII (Sept. 17, 1913, pp. 7) deals with *Infirmities*, giving statistics of the defective classes including those of "unsound mind."

The appendix to bulletin 18 (June, 1913), of the "Monthly Summary of Australian Statistics" is devoted to *Statistics of Small-pox and Vaccination in Australia and Other Countries* (Commonwealth Bureau of Census and Statistics, Melbourne, Aug. 14, 1913, pp. 13). There are statistics for the United Kingdom, continental countries, Japan as far back as 1881, and for the United States since 1899. There is a brief bibliography.

Insurance and Pensions

MISSOURI ORR LAW AGAINST COMBINATIONS OF INSURANCE COMPANIES. In the early months of this year the legislature of the state of Missouri enacted an anti-trust law known as the Orr law, at the same time repealing the Oliver law of 1911, under which the fire insurance companies of the state had been operating. One section of the Orr law read as follows:

In any proceeding against or prosecution of any insurance company under the provisions of this article, it shall be *prima facie* evidence that such company is a member of a pool, trust, agreement, confederation or understanding to control, affect, or fix the price or premium to be paid for insuring property against loss . . . if it be shown that such company or any agent or representative thereof in writing insurance has used any insurance rate, . . . prepared, published, kept or furnished by any person, association of persons or bureau employed by, representing or acting on behalf of any other insurance company or association in and about the making and publishing of insurance rates for use in any portion of this state.¹

In the middle of April, representatives of leading fire insurance companies met in Philadelphia and voted to cease operations in Missouri after April 30. The Western Union, though in session in Philadelphia at the same time, took no action, fearing to violate the anti-trust

¹ House bill No. 477, Sec. 10, §13 A; approved March 29, 1913.

law.² Shortly after, in the same month, representatives of those companies not participating in the Philadelphia conference met in Pittsburgh and likewise decided that the companies could not safely transact business in Missouri while the Orr law was in force.³

Close upon the heels of this decision to suspend business, Superintendent of Insurance Revelle announced that he would revoke the license of any company taking such action. He stated that a company could not suspend and that the only course open was to withdraw from the state, in which case he would revoke the licenses. In reply, the companies announced that if this were done, they would cancel all insurance in force in the state. Obviously, if the insurance superintendent revoked the licenses held by the various companies, the latter would have no power to do business in the state. It is difficult, therefore, to see how the companies could legally act in any other way, assuming that the insurance superintendent carried out his announced intention. At any rate, the threat caused the attorney general to take action, and he instituted two proceedings before the supreme court of the state in the nature of *quo warranto*. Both charged conspiracy to cease selling fire insurance in the state. One of the proceedings in addition merely asked that an injunction issue to prevent the cancellation of policies already in force.⁴ The second proceeding asked also for an injunction to prevent the companies from refusing to do a general fire insurance business and from refusing to write and sell insurance.⁵

On Monday, April 28, the court in the latter case granted a temporary injunction, but only upon the point of cancelling the insurance in force.⁶ On April 30 the companies suspended and in June Super-

²The resolutions of the Philadelphia meeting were as follows: "We, therefore, each for ourselves, have decided that we will on the 30th day of April, 1913, cease to directly or indirectly grant insurance on property in the state of Missouri until some safe and practical method for doing business in that state shall have been devised." Italics are the writer's.

³*Spectator*, May 1, 1913, p. 210.

⁴*State of Missouri ex. rel. John T. Barker, Attorney General v. Amazon Fire Insurance Company and 105 others.*

⁵*State of Missouri ex. rel. John T. Barker, Attorney General v. Assurance Company of America and 181 others.*

⁶One should note in fairness to the companies that the resolutions of the Philadelphia meeting cited in the footnote above were merely a decision to cease the writing of new business, after April 30. So far as the cancellation of the insurance in force was concerned, the companies seemed to have felt that this was the only result that could logically follow a revocation of licenses. Apparently, from the first they had no desire to cancel existing insurance.

intendent Revelle cited all of them to show cause on July 1 why their licenses should not be revoked.⁷ Before that date, however, the supreme court handed down a decision (June 28) holding that the fire insurance companies must answer the charge of conspiracy. The court also issued a temporary injunction, practically identical with that issued in April, against their cancelling insurance contracts already in force. Attorney General Barker then began preparations for a hearing on the conspiracy cases which were scheduled to begin August 1, but on August 12 the companies resumed business in the state and the difficulty was over.

To understand the nature of this controversy it is necessary to go back to the Oliver law of 1911. In essence, this law was a state rating law. Every insurance company was required to file with the insurance superintendent general basis schedules giving the charges, credits, terms, privileges, and conditions in any way affecting the rates. After the filing of these basis schedules, the company was further required to file rates for each risk or class of risks as derived from the basis schedules. The superintendent of insurance was empowered to investigate whether the rates were unreasonable or discriminatory, and if found so to be he was authorized to determine what schedule of rates would be reasonable and just, and to direct the companies to file new rates not in excess of those found reasonable by him.⁸

Under the provisions of this bill a considerable reduction in rates and hence in premium income seems to have taken place.⁹ Now since 1909 the loss ratio in Missouri has been the following:

1909.....	59.3 per cent
1910.....	60.0 " "
1911.....	76.5 " "
1912.....	72.5 " "

For the exceptionally heavy losses of the last two years, rightly or wrongly, the Oliver law was blamed.¹⁰ A synopsis of the underwriting operations of sixty-five millionaire fire insurance companies for the ten-year period ending in 1912, showed an expense ratio of 36.66 per cent.¹¹ Applying this ratio to the loss ratio mentioned above, it becomes evident that the companies in the state of Missouri were doing business either at a loss or upon a very narrow margin of profit during 1911 and 1912.

The Oliver law also had the following provision: "Any one or more

⁷ *Spectator*, June 19, 1913, p. 271.

⁸ *Laws of Missouri 1911*, S. B. 25, pp. 268, 270.

⁹ *Spectator*, November 23, 1911, p. 246; December 14, 1911, p. 288.

¹⁰ *Ibid.*, April 17, 1913, p. 185.

¹¹ *Ibid.*, April 10, 1913, p. 174.

of such companies, singly or jointly, may employ for the making of such general basis schedules and rates and the filing of the same the services of such experts as it, or they, may deem advisable for such purpose."¹² The repeal of the Oliver law and the enactment of the *prima facie* section of the anti-trust law quoted above thus withdrew from the companies this privilege of making rates in common. Already the business in Missouri was a practically profitless one and the insurance companies were scarcely to be blamed for not caring to undergo the risk and expense of suits in court under the act. Moreover, if compelled to make rates separately, the result could scarcely be anything else than an enormous increase in expenses.

In defense of the new section of the anti-trust act, Attorney General Barker wrote the superintendent of the insurance department as follows, replying to five questions submitted by the American Central Insurance Company:

It is the opinion of this department that the mere fact that insurance companies in this state use the same rate book or write insurance at the same rate is not of itself a violation of the law, but before these companies are guilty of a violation of the law it must appear that they have entered into an agreement or conspiracy to charge the same rate.

. . . *prima facie* evidence is only evidence on first appearance, and is not sufficient to warrant a conviction, and the only way these companies can violate the law is by conspiring together to charge the same rate and in the absence of such a conspiracy or illegal agreement they do not violate the law by writing at the same rate.¹³

The *Spectator* pointed out, however, that the leniency thus hinted by the attorney general had no weight, as 115 county attorneys might start suits without regard to the attorney general.¹⁴

The results of the withdrawal of the companies were serious. The Missouri Bureau of Fire Prevention composed of about 400 state and special agents first suspended business.¹⁵ In July the St. Joseph bureau suspended and the St. Louis bureau was about to suspend. Credit and building operations throughout the state were seriously hampered and the governor was urged to call a special session of the legislature to repeal the obnoxious law. While affairs were apparently deadlocked, President Henry Evans of the Continental and Fidelity-Phoenix Company opened the negotiations which resulted in the final settlement, by sending Vice-President Rumsey of the same company to

¹² *Laws of Missouri, 1911*, S. B. 25, p. 269.

¹³ Carbon copy of the opinion of Attorney General Barker, dated April 16, 1913, and addressed to Superintendent Revelle.

¹⁴ *Spectator*, April 24, 1913, p. 197.

¹⁵ *Ibid.*, August 21, 1913, p. 78.

Missouri where the first conference was held.¹⁶ The upshot of the matter was that the attorney general in a written opinion stated that he believed the objectionable section of the law to be unconstitutional and agreed to dismiss the conspiracy writs pending; also to intervene and dismiss any proceedings which might be instituted independently by the 115 county attorneys referred to above. In addition, Governor Major agreed to appoint promptly a commission to report on the fire insurance situation.¹⁷

It is to be hoped that this little experience will prove a sound and salutary lesson to the state of Missouri. The wisdom of anti-compact laws has always been open to question. In 1911, a New York committee reported as follows:

As to the so-called anti-compact law: for the many reasons given, your committee believes that it would be most unfortunate for the public if a condition of open competition in rates were forced by the state. The safe policy to follow . . . is to recognize the good which flows from combinations well regulated; to permit the companies to use rating associations and bureaus to develop the principle of schedule rating and to spread the cost of determining proper rates among the companies, and to permit them to agree to maintain those rates.¹⁸

To the same effect is the report of an Illinois committee of the same year which condemns in no uncertain language the attitude of legislators opposed to the work of rating organizations and a common system of measuring risks.¹⁹

No one denies the wisdom of carefully regulating fire insurance companies, but there is probably no single field in which the principle of competition is less sound. The Oliver law represented an attempt by the state of Missouri to regulate the rates charged by the fire insurance companies. The repeal of that law and the enactment of the *prima facie* section of the Orr law was an attempt to force open competition in rates for fire insurance. In both cases the state's attitude seems to have been dictated by the desire to secure low rates. The wisdom of the first law, it is not for the writer to discuss here, but the second law as applied to fire insurance companies deserves unhesitating condemnation. However desirable low rates may be in them-

¹⁶ *Spectator*, August 14, 1913, p. 63.

¹⁷ *Indicator*, August 20, 1913, p. 323; and *Spectator*, August 14, 1913, pp. 63-64.

¹⁸ Report of the Joint Committee of the Senate and Assembly of New York, appointed to investigate corrupt practices in connection with . . . the affairs of insurance companies other than life, pp. 124-125.

¹⁹ "Report of the Illinois Fire Insurance Commission," *Illinois Insurance Report, 1911*, part I, pp. 920-923.

selves, yet if the only way in which to secure them is by open competition with its rank injustice to small insurers, then low rates must be discarded. The action of the companies, however much it may have been dictated by purely selfish motives, was none the less in defense of the small insurer and of equality in the distribution of the fire hazard. As such it deserves hearty commendation.

The appointment of a committee to examine into the fire insurance situation will be a step in the right direction. It is probably safe to predict that the report of such a committee will be to the same effect as the New York and Illinois reports above referred to, in which case a closer approach to justice for all concerned may be expected in future Missouri fire insurance legislation.

WILLIAM S. STEVENS.

Columbia University.

The address of W. T. Emmet, superintendent of insurance of New York, delivered before the National Association of Local Fire Insurance Agents, October 15, 1913, on *What Should be the Attitude of the State toward the Business of Fire Insurance?* has been issued as a reprint (Albany, pp. 14). Mr. Emmet suggests the possible need of state supervision of rates in so far as is necessary for the maintenance of reserves in order to secure solvency.

Other pamphlets on insurance to be noted are *Report of the Special Committee on the Insurance Rating Law*, of Missouri (Jefferson City, 1913, pp. 13); and *Report on Examination of the Workmen's Compensation Service Bureau*, New York, made by the Insurance Department, New York (Albany, July 30, 1913, pp. 42); *The Workmen's Compensation Situation in New York State*, an address delivered by William T. Emmet at the National Convention of Insurance Commissioners, August 1, 1913 (Albany, pp. 11).

The Department of Social Economics of the London Municipal Society has issued a pamphlet on *The National Insurance Act. First Annual Report* (33 Tothill St., Westminster, London, S. W., July, 1913, pp. 15).

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Theory

(Abstracts by W. M. Adriance)

ALLIX, E. *L'oeuvre économique de Germain Garnier traducteur d'Adam Smith et disciple de Cantillon*. Rev. d'Hist. Doc. Econ., No. 4, 1912. Pp. 26.

One of the author's careful studies of the development of economic thought and its relation to political and social life.

BODIN, C. *La valeur d'après les économistes anglais*. Rev. d'Econ. Polit., July-Aug., 1913.

A review of Turgeon's book on the history of value theory in England.

BOEHM-BAWERK, E. and SCHUMPETER, J. *Eine "dynamische" Theorie des Kapitalzinses*. Zeitschr. f. Volkswirtsch., Nos. 1, 4, 5, 1913. Pp. 62, 41, 17.

An extended and strongly adverse review of Schumpeter's interest theory, written in Böhm-Bawerk's most brilliant critical style; the reply by Schumpeter, and Böhm-Bawerk's "concluding remarks."

BROCK, F. H. *Nagot om monopolvinsten och dess beskattning samt om gross- och detalj-handelspris*. Ek. Tids., No. 1, 1913. Pp. 4.

An answer to Professor Wicksell as to monopoly profits and the relation of wholesale to retail prices.

BROWN, H. G. *The marginal productivity versus the impatience theory of interest*. Quart. Journ. Econ., Aug., 1913. Pp. 20.

Noteworthy in that the author, a disciple and colleague of Fisher, now goes over to the ranks of the productivity theorists.

CHATELAIN, E. *Le problème de la variation du revenu total croissant entre le capital et le travail*. Rev. Econ. Int., Nov. 15-20, 1912. Pp. 8.

Continues a discussion with M. Yves Guyot as to whether Bastiat or Rodbertus more correctly formulated the laws governing the relative distributive shares going to capital and labor respectively.

CLEMENT, H. *La doctrine de Saint-Simon*. Réf. Soc., Apr., 1913.

An anti-socialistic review.

CONRAD, O. and OSWALD, H. *Das Prinzip von Leistung und Gegenleistung als theoretisches Problem*. Zeitschr. f. Sozialwis., No. 10, 1912.

COOLEY, C. H. *The institutional character of pecuniary valuation*. Am. Journ. Sociol., Jan., 1913. Pp. 13.

An indictment of economists, who, in their theories of value, are accused of overlooking some of the most essential conditioning factors, viz., social and institutional influences. An important article.

CUNNINGHAM, W. *The economic basis of universal peace*. Econ. Rev., Jan., 1913. Pp. 7.

D'EICHTAL, E. *L'économiste Frédéric List, candidat à l'un des concours de l'Académie des sciences morales et politiques en 1837.* Rev. Bleue, Mar. 29, 1913. Pp. 7.

An account of the essay on protection submitted by List in 1837 in competition for the prize offered by the Académie des Sciences at Paris.

ENGLAND, M. T. *Economic crises.* Journ. Pol. Econ., Apr., 1913. Pp. 10.

Completes former studies of economic crises by giving in outline the author's theory of crises.

FANNO, M. *Le teoria del mercato monetario.* Giorn. d. Econ., Mar., 1913. Pp. 25.

The interest theories of various economists, European and American, are the basis of this study of the theory of the money market.

FEILBOGEN. *L'école autrichienne d'économie politique.* Journ. des. Econ., Apr., 1913. Pp. 8.

A continuation. Gives an account of the work of Schumpeter.

FEUCHTMANGER, L. *Die ethischen Grundlagen der Nationalökonomie im Lichte der neuen "Tätigkeitsphilosophie."* Schmollers Jahrb., No. 2, 1913.

FRIBOURG, A. *La repopulation et Colbert.* Grande Rev., Mar., 1913. Pp. 11.

An account of Colbert's views on population, and his efforts to build up population in Canada.

GIDE, C. H. *Smart's "Theory of Value."* Rev. d'Econ. Polit., July-Aug., 1913.

A review of the new edition of Smart's well-known work.

GUYOT, Y. *Définition, caractère et indices des crises.* Journ. des Econ., Aug., 1913. Pp. 26.

HANEY, L. H. *Der Einfluss des Sozialismus auf die Volkswirtschaftslehre.* Archiv f. Geschichte Sozial., No. 2, 1913. Pp. 16.

In a brief historical review Professor Haney shows the stimulus which economic theory has received from socialistic criticism.

HERKNER, H. *Der Kampf um das sittliche Werturteil in der Nationalökonomie.* Jahrb. f. Gesetz. Verw. u. Volksw., No. 2, 1913.

HEYN, O. *Zur Frage der Eliminierung des Wertproblems aus der Geldtheorie.* Zeitschr. f. Sozialwis., No. 1, 1913.

DE JOHANNIS, A. J. *Il capitale disponibile.* Rif. Soc., Apr., 1913. Pp. 15.

Restriction of the term to new values created by production.

KOEFOED, M. *Emil Meyer.* Nat. ök. Tids., Jan.-Feb., 1913. Pp. 10.

An appreciation of Emil Meyer, a Danish economist, who died Jan. 2, 1913.

LEVY, R. G. *L'économie politique aux Etats-Unis.* Rev. Intern. du Com., June, 1913. Pp. 38.

A detailed review and summary of Taussig's *Principles of Economics.*

LIEFMANN, R. *Theorie des Sparens und der Kapitalbildung.* Schmollers Jahrb., No. 4, 1912.

LOBIA, A. *Quelques remarques sur la rente du sol urbain*. Rev. d'Econ. Polit., Mar.-Apr., 1913. Pp. 15.

A discussion of the nature of ground rent.

MCCREA, R. C. *Schumpeter's economic system*. Quart. Journ. Econ., May, 1913.

Schumpeter's work on pure theory has now been followed by a theory of dynamic economics. (*Theorie der Wirtschaftlichen Entwicklung*.) Both books are here very thoughtfully reviewed.

MURRAY, R. A. *Sui presupposti logici della scienza economica*. Riv. Ital. di Sociologia, May-Aug., 1913. Pp. 8.

DI NOLA, C. *Gli odierni aspetti dell' economia agraria*. Giorn. d. Econ., Apr., 1913. Pp. 35.

Considers chiefly the factors that enter into the determination of rent.

OBERFOHREN, E. *Jean Bodin und seine Schule*. Weltwirtsch. Archiv, Apr. 1913. Pp. 35.

Formulates a system of economics from the views of Bodin and his followers.

OLDENBURG, K. *Gerechtigkeit und Kommunismus in der heutigen Volkswirtschaft*. Jahrb. f. Gesetz. Verw. u. Volksw., No. 3, 1912.

OSWALT, H. *Der Ertragsgedanke*. Zeitschr. f. Socialwis., May, June, 1913.

PERSONS, C. E. *Marginal utility and marginal disutility as ultimate standards of value*. Quart. Journ. Econ., Aug., 1913. Pp. 30.

Sees in the inequality of distribution a dominant factor in the determination of value.

PICARD, R. *Les mutations des monnaies et la doctrine économique en France, du XIV^e siècle à la Révolution*. Rev. d'Hist. Doc. Econ., No. 4, 1912. Pp. 25.

An outline history of French currency and of the ideas on money expressed by writers in the course of the period under review.

RICCI, U. *Che cosa è il reddito*. Giorn. d. Econ., Aug., 1913. Pp. 35.

An attempt to give, for both static and progressive societies, a definition of income which should at least have the virtue of precision.

RIST, C. *Böhm-Bawerk's positive theorie des kapitals*. Rev. d'Econ. Polit., May-June, 1913. Pp. 3.

A review of the new (third) edition.

ROBINSON, L. N. *The seminar in the college*. Journ. Pol. Econ., July, 1913. Pp. 4.

Joins issue with the view of Professor Seligman (cf. J. P. E., Feb., 1912) that the seminar method is for the university, not for the college.

ROGERS, A. K. *Burke's social philosophy*. Am. Journ. Sociol., July, 1912. Pp. 26.

Burke's philosophy is tested by the standards of modern sociology, and found wanting.

SCHALLMAYER, W. *Höherentwicklung und Menschenökonomie*. II. Zeitschr. f. Socialwis., Apr., 1913.

SERGI, G. *Qualche idea sul progresso umano*. Riv. Ital. di Sociologia, Jan.-Feb., 1913. Pp. 8.

Human progress is of various kinds, which do not necessarily move together.

TUGAN-BARANOWSKY, M. *Soziale Theorie der Verteilung*. Ann. f. Soz. Pol. u. Gesetz., II, 5-6, 1913.

WALTHER, A. *Geldwert in der Geschichte. Ein methodologischer Versuch*. Viert. Schr. f. Sozial u. Wirts. Gesch., X, 1, 2, 1912. Pp. 51.

WOLFE, A. B. "Sourcebooks" in elementary economics. Journ. Pol. Econ., May, 1913. Pp. 6.

Includes a review of Professor Fetter's *Source Book in Economics*.

YOUNG, A. A. Pigou's "Wealth and Welfare." Quart. Journ. Econ., Aug., 1913. Pp. 14.

A thoughtful review of Pigou's recent book.

Economic History, Foreign

(Abstracts by Clive Day)

ASHLEY, W. J. *Comparative economic history and the English landlord*. Econ. Journ., June, 1913. Pp. 17.

An interesting comparison of the course of development of landed property in modern and recent times, in which the author answers as follows: "the question why the English land system differs from the systems of France or Germany. England owes its present land system, with all its merits and demerits, to the operation on the upper classes of the ordinary motives of self-interest. These classes were enlarged and strengthened by the growth of trade; and they were set free to carry out their will—and this, after all, was the main thing—by the triumph of the Reformation and the victory of Parliament."

BACHI, R. *L'Italia economica nel 1912*. Rif. Soc. (supplement), June, July, 1913. Pp. 285. €

Similar in plan and character to the yearbook for 1911, reviewed in the REVIEW for December, 1912, page 888.

BRUNO, A. *Intorno alle origini della famiglia*. Riv. Ital. di Sociologia, May-Aug., 1913. Pp. 18.

Not by considerations pertaining to primitive sexual morality, but by comparative studies of primitive social organization, are the theories of Bachofen, Morgan, Lubbock, Ferguson and McLennan to be proved erroneous.

DEPITRE, E. *Le système et la querelle de la "Noblesse commerçante" (1756-1759)*. Rev. d'Hist. Doc. Econ., No. 2, 1913. Pp. 137-176.

An analysis of the Abbé Coyer's work and of the polemic to which it gave rise: a contribution to the history of economic doctrine based on an extensive knowledge of the literature of the period.

DONALD, W. J. A. *Factors in Canadian industrial development*. Queen's Quart., Apr.-May-June, 1913. Pp. 12.

A sketch covering the economic history of Canada from the period of French rule to the present.

DURAND, R. *La taille dans les généralités du secrétariat d'état de la maison du roi sous Louis XIV (1638-1709)*. Rev. d'Hist. Doc. Econ., N^o. 2, 1913. Pp. 20.

Statistics from the national archives, showing year by year, with some gaps, the amount of *taille* attributed to each election in a considerable part of France. The figures make prominent the importance of Paris and its subordinate districts as a source of revenue.

ECKEL, E. C. *The growth of modern industrialism*. Engg. Mag., June, 1913. Pp. 13.

Popular.

GUYOT, Y. *La situation économique des pays bas*. Journ. des Econ., Sept., 1913. Pp. 26.

Statistical survey.

JOSEPH, L. *Economic development of Germany in the nineteenth century, with special regard to the period from 1871*. Scottish Bankers' Mag., July, 1913. Pp. 15.

A statistical survey.

LAUREYS, H. *Nos industries manufacturières*. Rev. Econ. Canadienne, Apr., 1913. Pp. 15.

Analysis of the figures in the fifth Canadian census (1910); two charts, showing development by province and by industry since 1900.

LEFORT, J. *Les banquiers à Rome*. Rev. Gen. du Droit, Jan.-Feb., 1913. Pp. 7.

LETACONNOUX. *Le comité des députés extraordinaire des manufactures et du commerce de la France et l'oeuvre économique de l'Assemblée constituante*. Ann. Révolut., Mar.-Apr., 1913.

LHERITIER, M. *Histoire des rapports de la chambre de commerce de Bordeaux avec les intendants, le Parlement et les jurats, de 1705 à 1791*. Rev. d'Hist. Bordeaux, Nov.-Dec., 1912. Jan.-Feb., 1913.

MARTIN SAINT-LEON, E. *Les anciennes corporations de métiers et la lutte contre la fraude dans le commerce et l'industrie*. Réf. Soc., May 16, 1913. Pp. 10.

MAZZEI, I. *Federico Ozanam e i suoi tempi*. Riv. Internazionale, Aug., 1913. Pp. 35.

Ozanam (1813-1853) was a leading priest of his time; his social views are held to be of permanent interest to Roman Catholics.

MONTFRET, E. *L'indépendance économique du Canada français*. Rev. Econ. Canadienne, May-June, 1913. Pp. 14.

Based on Bonchette's book of the same title; written from the nationalist and protectionist standpoint, but moderate in tone, and pleading particularly for the development of extractive industries, and for better technical education.

DE NOUVION, G. *Le République Argentine d'après les publications récentes.* Rev. Intern. du Com., Mar., 1913. Pp. 131.

Continuation of a preceding article, completing an historical and statistical sketch of the development of the Argentine Republic.

PAWŁOWSKI, A. *La situation économique et financière de l'Italie.* Journ. des Econ., Apr., 1913. Pp. 17.

A concise and useful statistical survey, which shows that Italy prospered and developed even in a period of war.

QUESNETTE, F. *L'administration financière des Etats de Bretagne de 1689 à 1715.* Ann. de Bretagne, Jan., Apr., 1913. Pp. 16, 15.

RAFFALOVICH, A. *Un recensement économique et financier de l'Allemagne.* L'Econ. Franç., July 26, 1913. Pp. 2.

A summary of Helfferich's contribution to the volume published to commemorate the progress during the twenty-five years of the reign of William II.

RAUDNITZ, J. *Die staatswirtschaftliche Entwicklung Bulgariens.* Zeitschr. f. Volkswirtsch., XXII, 2-3, 1913. Pp. 33.

A good summary and appreciation of Bulgarian public finance (revenues, expenditures, and debt).

REGISTER, L. B. *Notes on the history of commerce and commercial law: I, Antiquity.* Univ. of Penn. Law Rev., May, 1913.

SIMKHOVITCH, V. G. *Hay and history.* Pol. Sci. Quart., Sept., 1913. Pp. 18.

A contribution, fresh and interesting, to one of the moot points of economic history, the problem of the village community. The author explains the persistence of open-field holdings by the lack of roots and grasses, and of the stimulus to cultivation in severalty which followed their introduction and led to the enclosures. He shows how division among heirs may lead to intermixed holdings; but does not discuss the question of the existence of the strips *ab initio* as a result of the process of clearing. He does not touch at all that feature of mediaeval agrarian organization which is most baffling and most important, namely, the equality of the holdings, not as between members of the same family (explained by inheritance), not as between families in the same village (as in Russia, explained by the fiscal pressure of the central government), but as between villages of the same country (cf. the English virgate), and even of the different countries (cf. the German *Hufe*, etc.).

SZTERENYI, J. *Die ungarische Industriepolitik.* Zeitschr. f. Volkswirtsch., XXII, 2-3, 1913. Pp. 40.

A clear statement of the measures taken in Hungary during the past generation to meet the problems of housework, handicraft, and the factory system. The results, in the author's opinion, are well worth the cost.

THOMPSON, F. C. *The agrarian legislation of Spurius Thorius.* Classical Rev., Feb., 1913.

THOMPSON, M. S. *Social and economic conditions in Greece*. Sociol. Rev., July, 1913. Pp. 8.

VERMALE, F. *La cherté de la vie à Paris en floréal an III (avril-mai, 1795) d'après des lettres inédites*. Ann. Révolut., Mar.-Apr., 1913.

VIMARD, H. *Un centre industriel en Pologne: Lodz*. Rev. Sci. Pol., May-June, 1913. Pp. 27.

Brief historical sketch, and social and economic analysis.

WEISS-BARTENSTEIN, W. K. *Ueber Bulgariens volkswirtschaftliche Entwicklung*. Zeitschr. f. Volkswirtsch., XXII, 2-3, 1913. Pp. 22.

An article notable among others of its kind for its clear description of the economic organization without the padding of extended statistical data.

WEBER, L. *Le rythme du progrès et la loi des deux états*. Rev. de Métaphysique, Jan., 1913. Pp. 45.

A study of technical and cultural progress.

WILMERSDOERFFER, E. *Die wirtschaftliche Lage Italiens in der Gegenwart*. Schmollers Jahrb., No. 2, 1913. Pp. 21.

A lecture discussing the recent past, the present, and the future.

Economic Geography

(Abstracts by E. V. D. Robinson)

HEROY, W. B. *Land classification: Its basis and methods*. Ec. Geol., June, 1913.

Remaining public lands are in arid and semi-arid districts, hence value for grazing, agriculture, or even mining turns chiefly on water supply. Classification on this basis is, therefore, indispensable to intelligent use. Tracts containing possible watering places for stock were withdrawn from entry in 1912, pending the elaboration of a leasing system. Classification is also in progress with reference to dry farming, irrigation, and water power.

MENDEL, J. *Die internationale Organisation der Petroleumgewinnung und des Petroleumhandels*. Weltwirtsch. Archiv, July, 1913.

An excellent review of the petroleum industry in all countries, considered both from the standpoint of production and consumption. The writer calls it an international industry.

NASON, F. L. *Some suggestive phases of the iron mining industry of eastern North America*. Journ. Can. Min. Inst., Vol. XIV.

RICKETTS, A. H. *The truth about "Pinchot's doughnuts"*. Min. & Engg. Wld., July 26, 1913.

A violent attack on the administration of the federal forest reserves, by a San Francisco lawyer. Appears to represent the viewpoint of waterpower and land companies.

SCHACHT, H. *Zur Finanzgeschichte des Ruhrkohlen-Bergbaues*. Schmollers Jahrb., No. 3, 1913.

A somewhat detailed account by districts, from the period when

mining was a side industry carried on by peasants, down to the present.

SINGER, C. *The early history of tobacco*. Quart. Rev., Aug., 1913.

Antiquarian rather than economic in character.

TOWER, W. S. *Nitrate fields of Chile*. Pop. Sci. Mo., Sept., 1913.

Popular sketch of development and organization of nitrate industry. Some good illustrations. Origin of deposits is attributed to guano.

Cost of reclamation service and other irrigation projects in Colorado. Engg. News, Aug. 21, 1913.

Endeavors to show that government irrigation works cost about double as much to build and operate as private systems. Director Newell in reply points out that the easier and more profitable projects were taken up first by private capital, only those being left for the reclamation service which private capital refused to undertake.

Agricultural Economics

(Abstracts by John Lee Coulter)

BECKMAN, F. *Die Entwicklung des deutsch-russischen Getreideverkehrs unter den Handelsverträgen von 1894 und 1904*. Jahrb. f. Nat. Oek., Aug., 1913. Pp. 26.

BRANSON, E. C. *The Georgia Club*. Bull. 23, U. S. Bur. of Edu., 1913. Pp. 41.

A comprehensive review of the work of this club, organized principally to investigate farm-life problems and remedy evils. Includes questions, schedules, and specimen results.

BRUGUIER. *L'Agro Romano e gli usi civic*. Riv. Intern., July, 1913. Pp. 20.

Appropos of a proposed law touching the problem of the Roman campagna.

CALDWELL, J. C. *Long-time loans needed by organized agriculture*. Pamphlet, reprint from "Lexington (Kentucky) Herald," Aug. 20, 1913. Pp. 12.

A carefully prepared statement by a farmer and banker after personal study of coöperation among farmers in different European countries.

COULTER, J. L. *The problem of rural credit or farm finance in the United States*. Special Bull. No. 1, Wis. Sta. Bd. of Agri., Apr., 1913. Pp. 40.

A review of needs in the United States, based upon the present conditions known to exist, with ten recommendations.

COULTER, J. L. *Observations concerning coöperation in rural Europe*. Amer. Coöp. Journ., May, Aug., Sept., Oct., 1913.

Articles describing coöperation as inspected in different countries during an investigation for the United States government.

DAURE, L. *Les fraudes alimentaires*. Mouv. Social, Aug. 15, 1913. Pp. 6.

An analysis of the frauds and falsifications from 1907 to 1911 found by the division of the Department of Agriculture interested in the inspection of cider, vinegar, wine, beer, spirits, etc.

DAVIS, C. H. *Rural banking and currency reform*. Sen. Doc. 140, 63d Cong., 1 Sess., July, 1913. Pp. 19.

An address before the South Carolina Bankers' Association outlining a scheme of rural banks.

DAVIS, C. H. *The Davis plan of rural banks*. Sen. Doc. 141, 63 Cong., 1 Sess., July, 1913. Pp. 27.

An address delivered before the North Carolina Bankers' Association and representatives of the Committee on Rural Finance of the various state bankers' associations of the Southern states, going into many further details than Senate Document No. 140.

EGAN, M. F. *Notes on agricultural conditions in Denmark*. Sen. Doc. 992, 62d Cong., 3 Sess., Jan., 1913. Pp. 34.

Basis of a series of lectures delivered in various southern states in the spring of 1912 under the auspices of the Southern Commercial Congress.

HARRIS, B. F. *The banker and his relation to the public welfare*. Pamphlet, First Nat'l Bank, Champaign, Ill., July, 1913. Pp. 28.

The crystalization of addresses delivered before the state bankers' conventions of six states during the spring. Pertains chiefly to country life.

HARRIS, B. F. *Problems of rural life from the banker's standpoint*. Address delivered before the Chicago Bankers' Club, Oct., 1912. Pp. 20.

All phases of the farmers' business examined by a specialist looking in from the outside.

HILL, J. S. *Coöperation and the work of the American Commission in Europe*. Address delivered at State Convention of Farmers, Raleigh, N. C., Aug. 27, 1913. Pp. 16.

Review of European experience and suggested improvements in the business side of farming in the United States, and particularly in North Carolina.

HOPKINS, C. G. *Facts and fiction about crops*. Science, Mar. 28, 1913. Pp. 6.

A comparative study of the reports of the Census Bureau and Bureau of Statistics of the Department of Agriculture with reference to the production of farm crops.

JONES, G. *Some methods of financing the farmer*. Pamphlet, Denver Chamber of Commerce, Aug., 1913. Pp. 16.

An address delivered before the Conference of Governors and other bodies by a member of the American Commission for the study of European rural credit systems. The author is a leading banker and recognized authority.

LEROY-BEAULIEU, P. *La production, la consommation et les prix du blé*. L'Econ. Franç., Sept. 20, 1913. Pp. 2.

The second article of a series—the first being in the issue of September 6. A very careful analysis of the relation between the production, consumption, and price of wheat.

McGOVERN, F. E. *The market commission bill, and the governor's communication in relation thereto.* Pamphlet, Mar., 1913. Pp. 42.

Copy of bill submitted to the Wisconsin legislature, proposing a complete supervision of marketing of agricultural products for Wisconsin farmers.

McGOVERN, F. E. *Message to the Wisconsin legislature, regular session.* Pamphlet, Jan. 9, 1913. Pp. 56.

Sections devoted to rural credit, marketing, coöperation, etc.

DE MOLINARI, M. *Mouvement agricole.* Journ. des Econ., June, 1913.

Largely scientific, referring to technical findings in different countries, but reviewing Canada's experience in the control of commerce in that country of the grain trade.

MOSS, R. W. *How we may grant short-time personal credit to the farmers of the United States.* Address, House of Rep., Sept. 11, 1913. Pp. 16.

A review of European systems of rural credit gained by personal observation as a member of the United States Commission to study systems in Europe and recommend a policy for the United States.

MOORE, H. H. *A normal day's work for various farm operations.* Bull. No. 3, U. S. Dept. of Agri., Sept., 1913. Pp. 44.

A detailed and rather exhaustive study of the problem with careful illustrations and tables to clearly bring out all conclusions.

OSBORN, C. *The town labourer and the land.* Charity Organ. Rev., July, 1913. Pp. 9.

A review of the success of the Vacant Land Cultivation Society organized in London in 1908.

PRICE, H. C. *Rural credit in Germany.* Bull. 18, Ohio State Univ., Feb., 1913. Pp. 31.

A summary of the German systems of rural credit, being a result of several months' study in that country.

ROBINSON, L. G. *Scientific farming and scientific financing.* Ann. Am. Acad., Mar., 1913. Pp. 11.

A general statement of American needs and European experience, with some illustrations of attempts in this country, particularly among Jewish farmers.

THOMPSON, C. W. and WARBER, G. P. *Social and economic survey of a rural township in southern Minnesota.* "Studies in Economics," No. 1, Univ. of Minn., April, 1913. Pp. 75.

One of the best, if not the best, survey of economic and social rural life which has yet appeared.

THOMPSON, C. W. *Studies in egg-marketing.* Bull. 132, Minn. Agri. Exp. Sta., Apr., 1913.

A bureau of research in agricultural economics has been established at the Experiment Station, and this is one of the first special bulletins.

UNSTEAD, J. F. *Tables of statistics with explanatory text, of the wheat cultivation and trade of six European nations during the years 1881-1910.* Geog. Journ., Aug., 1913.

Reviewed in "The Nation," August 28, 1913, p. 190.

VON ENGELKEN, F. J. H. *The German farmer and coöperation*. Sen. Doc. 301, 63d Cong., 1 Sess., Sept., 1913. Pp. 18.

Report of the author who was a member of The American Commission to study coöperation among European farmers.

WOLFF, H. W. *Report on agricultural credit and coöperation in Germany*. Econ. Journ., June, 1913. Pp. 4.

A careful review by one of the greatest authorities in the world of the report of an inquiry into agricultural credit and agricultural coöperation in Germany by J. R. Cahill. This comprehensive report of some 500 pages has been reprinted by the United States Senate for American use.

ZOLLA, D. *Les accidents du travail et les intérêts agricoles en France et à l'étranger*. I. Rev. Sci. Pol., July-Aug., 1913. Pp. 18.

This is the first of a series of articles concerning accidents on farms, comparisons are made with records of accidents in general, and the laws under discussion are quoted in full.

Annual report of the Virginia Fruit Growers, Inc., for year ending March 1, 1913. Pamphlet, Staunton, Va., Mar., 1913. Pp. 33.

This is a review of the last year's experience of a mutual selling and purchasing agency, and contains much of interest to the scientific economic student. The two preceding annual reports are equally instructive.

Lists of . . . agricultural organizations in the United States. Sen. Doc. No. 1109, 63d Cong., 3 Sess., Feb., 1913. Pp. 125.

A very useful list of organizations of farmers compiled in response to Senate Resolution of December 12, 1912, under the direction of the Secretary of Commerce and Labor and the Secretary of Agriculture.

Report of the delegates of the United States appointed to attend the General Assembly of the International Institute of Agriculture at Rome in May, 1913. Sen. Doc. 196, 63d Cong., 1 Sess., Sept., 1913. Pp. 64.

Includes minutes of meetings, together with record of all actions taken by the General Assembly, and reviews the work of the Institute and the permanent delegate.

Report of committee appointed by the governor of North Carolina on needs of North Carolina farmers with regard to credits, marketing, and coöperation. Oct., 1913. Pp. 13.

The result of a careful study of the needs of North Carolina farmers with a series of careful recommendations.

Commerce

ANDREADES, A. *La marine marchande grecque*. Journ. des Econ., Sept. 15, 1913.

DIETRICH, B. *Die Ausfuhr von Qualitätsware und der internationale Muster-schutz*. Weltwirtsch. Archiv, July, 1913.

DOEHLE, W. *Der Tabakmarkt in Holland*. Weltwirtsch. Archiv, July, 1913.

- HARRIS, H. W. *Methods of selling American goods in Europe. Germany.* Daily Cons. & Trade Rpts., Aug. 18, 1913. Pp. 7.
- HERNER, H. *Die "internationale Schiffvermessung" im Verhältnis zu ihrer weltwirtschaftlichen Bedeutung.* Weltwirtsch. Archiv, Oct., 1913.
- MICHEL, R. *Tendenzen des italienischen Handels im östlichen Mittelmeer.* Weltwirtsch. Archiv, July, 1913.
- MURRAY, S. L. *The deflection of our export trade in time of war.* Nineteenth Cent., Aug., 1913.
- ROSENBAUM, S. *The trade of the British Empire.* Journ. Royal Statist. Soc., July, 1913. Pp. 36.
- SHORTT, A. *The balance of trade in Canada.* Census & Statist. Mo., July, 1913.
- WHELPLEY, J. D. *Foreign trade in the United States.* Century, Oct., 1913.
- How 5,000,000 people are fed.* Greater N. Y., Oct., 1913.
- Railway coöperative stores in New York.* Elec. Ry. Journ., July, 12, 1913.

Railways

(Abstracts by Ernest R. Dewsnup)

- ALLIX, G. *L'exploration des chemins de fer en Italie.* Journ. des Transports, June 28, July 5, 1913. Pp. 5.

Points out that the advantages conferred upon the personnel of the railways and upon the public are being secured at the cost of a decreasing net income, insufficient to cover interest charges upon capital.

- ALLIX, G. *La hausse générale des prix et les tarifs des chemins de fer.* Journ. des Transports, Aug. 23, 1913. Pp. 3.

A review of an article by M. C. Colson; concludes that an increase of railway charges will be inevitable sooner or later.

- ALLIX, G. *Canal et voie ferrée.* Journ. des Transports, Sept. 27, 1913. Pp. 3.

A reply to an article by M. Marcel Parte in the "Revue d'Economie Politique." Calls attention to the abandonment of the scheme for the canalization of the Moselle, to the failure of the Austrian canal project of 1901, etc.

- AMOROSO, L. *Uno stato nello stato.* Giorn. d. Econ., June, 1913. Pp. 15.

A vigorous attack on the Italian railroads as a state within the state.

- BOURNE, J. *National aid to good roads.* N. Am. Rev., Sept., 1913. Pp. 12.

A proposal that the federal Treasury should purchase state bonds, applying the difference, between the interest (4 per cent) that they would receive from the states and the interest (3 per cent) that they would pay, to the establishment of a sinking fund which would liquidate the principal in 50 years.

- DUNN, S. O. *Wanted: a commission on railroad accidents.* Atlantic, July, 1913. Pp. 8.

Remedies for the present situation are to be found in trespass laws, in training and discipline of men, in improvement of the physical

plant. Suggests that a commission be appointed to investigate the whole accident problem.

EDGEWORTH, F. Y. *Contributions to theory of railway rates*. Econ. Journ., June, 1913. Pp. 21.

The writer is confirmed in the deduction that discrimination accompanied with a moderate control is likely to be better, both for the customers and the monopolist, than monopoly forbidden to discriminate.

FAVARGER, P. *Les comptes des chemins de fer fédéraux en 1912*. Journ. des Econ., July, 1913. Pp. 15.

Though nationalization of railways in Switzerland has brought noteworthy advantages to employees and the public, the internal traffic still has to bear charges double those of neighboring countries, nor is any reduction in sight.

HAYES, H. V. *Original cost versus replacement cost as a basis for rate regulation*. Quart. Journ. Econ., Aug., 1913. Pp. 15.

Original cost should be interpreted as the sum of money expended by the undertaking for the property now in use for the benefit of the public.

HILL, J. G. *Government ownership of railway freight equipment*. Everybody's, Sept., 1913.

The government should purchase all freight cars and rent them out at a per diem charge of 50 cents plus 1 cent per car per mile.

HULT, A. B. *The question of increased freight rates*. Ry. Age Gaz., July, 25, 1913. Pp. 2½.

The managing director of the American Agricultural Association believes that an advance would relieve congested financial conditions, and would be in the interests of farmers and manufacturers.

JOHNSON, A. B. *Are American railroads overcapitalized?* Ry. Age Gaz., Aug. 15, 1913. Pp. 2½.

The writer, who is the president of the Baldwin Locomotive Works, finds that a comparison with conditions in Europe reflects favorably upon America's railways. A permanent policy of protection to railway revenues is needed. The same article appears in the "Railway World" for September.

JONES, E. *The commodity clause legislation and the anthracite railroads*. Quart. Journ. Econ., Aug., 1913. Pp. 37.

A history of the enactment and enforcement of the "commodity clause" of the Hepburn act. Even though further Supreme Court decisions should restore vitality to the clause so that in other industries it may be thoroughly enforced, it is extremely doubtful whether, in the anthracite industry, competitive conditions would be completely restored.

KUHN, J. E. *Some aspects of the subject of transportation*. Pro. Engrs. Club of Phila., July, 1913.

A general discussion of transportation facilities in the United States, with reference to the rapid increase of population and of traffic demands.

LAWSON, A. J. *Tramways of the United Kingdom*. Electrician (London), Aug. 8, 1913.

The financial position of the tramways is presented.

LEHFELDT, R. A. *Finance of railway nationalisation in Great Britain*. Econ. Journ., Sept., 1913. Pp. 8.

There seems to be almost nothing to encourage the view that railway nationalization would be a good thing financially.

MELCHIOR, R. *Die preussischen Staatseisenbahnen in ihren Ergebnissen und ihrer Finanzgebarung verglichen mit der Pennsylvania Railroad und der London and North-Western Railway*. Schmollers Jahrb., No. 2, 1913. Pp. 44.

Concludes that the Prussian state railway regarded as an economic enterprise has little cause to fear comparison with the best foreign railways.

NEWCOMB, H. T. *Mr. Barber on government ownership of railways*. A rejoinder. Ry. Wld., Sept., 1913. Pp. 4½.

The experience of Europe does not show that government ownership would reduce accidents, nor that it would reduce expenses; it would cause an inevitable rise in the rate of interest payable.

PIGOU, A. C. and TAUSSIG, F. W. *Railway rates and joint costs*. Quart. Journ. Econ., Aug., 1913. Pp. 8.

Professor Pigou thinks that there is a vital distinction between the *common and joint* risks of producing cotton fibre and cotton seed and the *common* costs of producing copper transport and coal transport. Professor Taussig does not admit the importance of this distinction, and urges that the principle of joint cost may be applicable, though a supply of one thing does not necessarily entail the supply of another.

PREYER, O. E. *Die Entwicklung des chinesischen Eisenbahnwesens in den letzten drei Jahren (1909 bis 1911)*. Archiv f. Eisenbahnw., July-Aug., 1913.

In 1908 there were in operation 4160 miles of lines and under construction 1440; in 1911, these figures were 6160 and 900 miles respectively. The proportion of operated lines in Chinese hands increased from 18 per cent to 57½ per cent.

RILEY, C. C. *Increasing freight car performance*. Ry. Age Gaz., Sept. 26, 1913. Pp. 2½.

Describes the methods of investigation and supervision that are used on the Baltimore and Ohio R. R. to increase mileage and loading averages.

RIPLEY, E. P. *Car shortage*. Ry. Age Gaz., Sept. 5, 1913. P. 1.

Car shortage is almost a world-wide condition, especially prevalent where industry and commerce are expanding.

SCHIMPF, G. *Wirtschaftliche Betrachtungen über Stadt- und Vorortbahnen*. VI. Archiv f. Eisenbahnw., Mar.-Apr., 1913. Pp. 34.

Conclusion. See REVIEW, vol. II, p. 987; vol. III, pp. 221, 495.

SWENGAAL, E. E. *Alaska's need of railway development.* Ry. Age Gaz., Sept. 5, 1913. Pp. 3.

Inadequacy of existing facilities and proposed improvements.

WEHRMANN. *Stimmen aus verschiedenen Ländern über die Verstaatlichung der Eisenbahnen.* Archiv f. Eisenbahnw., May-June, 1913. Pp. 18.

Abstracts of papers in the volume on *The State in Relation to Railways*, published by the Royal Economic Society of London. (Papers by Pierre Leroy-Beaulieu, Schumacher, Mahaim, Acworth, Dewsnup, Stephenson, and Stevens.)

WELLIVER, J. C. *Making a valuation of our railways.* Rev. Rev., Aug., 1913. Pp. 6.

Indicates the nature of the task before the Interstate Commerce Commission, its probable cost, and the steps already taken to organize the work.

WORTHINGTON, B. A. *Increasing freight car efficiency.* Ry. Age Gaz., Aug. 29, 1913. Pp. 1½.

A discussion, by the president of the Chicago and Alton Railroad, of the causes of delays to equipment in yards, and the means that are being used on his road for remedying them.

Boston loses differential case. Ry. World, July, 1913. P. ½.

The Interstate Commerce Commission held that rates on import traffic should not be lower from Boston than from New York.

Getting more movement for freight cars. Ry. Age Gaz., Sept. 5, 1913. Pp. 1.

Methods of increasing efficiency are suggested by two railway officials.

An interesting transportation system. Ry. Age Gaz., Sept. 19, 1913. Pp. 6½.

An illustrated article which describes the operation of the chain of water and rail communications of the United States Steel Corporation connecting the Minnesota mines with the Pittsburgh mills.

The limitations of regulation. Ry. Age Gaz., July 18, 1913. Pp. 2.

A sharp criticism of the report of the Interstate Commerce Commission on the railway situation in New England: the report itself, in leaving a loose end for every subject discussed, marks the limitation of government regulation of privately owned enterprise.

New Illinois public utilities law. Ry. Age Gaz., July 18, 1913. Pp. 1.

A commission of five members, with salaries of \$10,000 each and seven year appointments, is authorized. The law is modeled closely after that of Wisconsin.

Progress in the federal valuation of railways. Ry. Age Gaz., Oct. 3, 1913. P. 1.

The Board of Engineers of the Interstate Commerce Commission and the engineers' committee of the railways are reaching a common understanding on many important matters.

Railroad cost and efficiency. Ry. Age Gaz., July 11, 1913. Pp. 1½.

Suggests that railway expenditures might be pro-rated between the

passenger service and the freight service on the basis of value of service.

The railroad's attitude on the rate question. Ry. World, July, 1913. Pp. 9.

Summary of President Willard's speech before the Boston Chamber of Commerce. A five per cent horizontal increase in rates urged on the ground of increased costs of operation.

Railway efficiency. Nation, Oct. 2, 1913. P. 1½.

The railways have been exploiting the possibilities of scientific management for the last 16 years or more.

Railway statistics. Archiv f. Eisenbahnw., Mar.-Apr., May-June, July-Aug., 1913.

Austria, British India, German Africa, Prussia-Hesse, Siam—all for 1911 (March-April); Alsace-Lorraine, Bavaria, Netherlands, for 1911, and Sweden for 1909 (May-June); France, Hungary, and Wurttemberg for 1911, and Russia for 1909 (July-August).

Rate decision will promote city's commerce. Greater N. Y., Sept. 15, 1913. Pp. 4.

Abstracts are given of the recent decisions of the Interstate Commerce Commission, reducing rates to Duluth, the upper Mississippi crossings, and interior Iowa and Kansas points. General effect will be to break down barriers against New York on the Middle West.

Select list of references on train crew legislation. Special Libraries, June, 1913.

Four pages of references.

State rights and the railroads. Ry. World, July, 1913. Pp. 5.

An explanation of the significance of the decision of the Supreme Court on the Minnesota rate case.

Studies of operation—the C. B. & Q. Ry. Age Gaz., July 18, 1913. Pp. 3.

A growth in freight traffic of 98.3 per cent, from 1901 to 1912, was handled with a decrease of 9.8 per cent in train-miles.

Traffic improvements of the Connecticut Company. Elec. Ry. Journ., Aug. 16, 1913.

Gives an analysis of the financial and operating results secured after the consolidation of various trolley lines.

Transportation of freight. Elec. Ry. Journ., Oct. 4, 1913. Pp. 19.

Replete with details of the organization and working of the freight department of the interurban railway. Numerous photographs.

L'association des actionnaires et obligataires des chemins de fer français. Journ. des Transports, Sept. 20, 1913. Pp. 2½.

The association is interesting itself in (1) pension legislation, (2) problems presented by the expiration of the interest guarantees, (3) proposed legislation concerning the appointment of "agents superieurs," and (4) the movement of railway values.

Le chemin de fer Transpersan. Journ. des Transports, June 28, 1913. P. 1.

The Russian commission appointed to study the project has reported in favor of the construction of the railway from Aliata to Astara,

which will be the Russian link of the trans-Persian railway connecting Europe with India. The new line should reduce the time of transit from London to Bombay from the present 22 days (by sea) to $7\frac{1}{2}$ days.

Les chemins de fer Belges, I. Journ. des Transports, Sept. 27, 1913. Pp. 2.

The services and charges of the system are dealt with.

Dix ans d'exploitation par l'état. Journ. des Transports, July 19, 1913. Pp. $3\frac{1}{2}$.

A recital of improvements in the service and wage conditions of Swiss railway employees. But, it is asserted, the men are not satisfied.

La nouvelle convention de l'état avec la compagnie transatlantique. Journ. des Transports, Sept. 6, 1913. Pp. $2\frac{1}{2}$.

Explains, with approval, the new agreement between the French government and the Compagnie Générale Transatlantique for the conveyance of mail between Havre and New York.

Le nouveau "Railway Act" anglais de 1913. Journ. des Transports, Aug. 10, 1913. Pp. $\frac{1}{2}$.

A reference to the recent act of parliament authorizing a general increase of English railway tariffs.

Deutschlands Getreideernte im Jahre 1910 und die Eisenbahnen. Archiv f. Eisenbahnw., May-June, 1913. Pp. 26.

Regional statistics of the movement of grain within Germany.

Die Eisenbahnen der Erde, 1907-1911. Archiv. f. Eisenbahnw., May-June, 1913. Pp. 15.

During 1911 there was an increase in mileage of 2.7 per cent, as compared with 2.3 per cent for the preceding year. The total mileage was rather more than 660,000, 30 per cent of which was state-owned.

Erweiterung und Vervollständigung des preussischen Staatseisenbahnnetzes im Jahre 1913. Archiv f. Eisenbahnw., May-June, 1913. Pp. 42.

Prussia proposes to spend $108\frac{1}{2}$ million dollars during 1913 in establishing new lines, double-tracking, procuring equipment, etc.

Accounting

(Abstracts by John Bauer)

"*ARCANUS.*" *The prevention of fraud in small businesses.* Accountant, Sept. 20, 1913. Pp. 4.

A prize essay. Discusses simple accounting and checking devices.

BENTLEY, C. H. *A problem in the distribution of expense burdens.* Journ. Account., July, 1913. Pp. 26.

Briefly explains A. Hamilton Church's principles of distributing indirect expense, then presents and works out an extended problem to illustrate the application of the principles.

BERRIDGE, A. *The treatment of interest on manufacturing investment.* Journ. Account., July, 1913. Pp. 3.

Holds that interest should not be included in manufacturing costs.

BUTTS, W. E. *Bringing an old water-works valuation up to date.* Engg. News, Aug. 28, 1913. Pp. 2.

Presents index numbers of waterworks construction costs for 1884 to 1909, and shows that they run fairly parallel with the index numbers of general commodity prices averaged with the index numbers of cast-iron pipe prices. This parallelism is suggested as a basis for bringing an old works valuation up to date.

CAMPBELL, J. R. *Public accounting; its organization and relation to administration.* Accountant, Sept. 20, 1913. Pp. 8.

Explains why government accounting is much less perfect than commercial accounting. Discusses standards and ideals, and compares especially English and United States experience.

CULSHAW, W. *Motors for municipalities—the economic aspect.* Accountant, July 26, 1913. Pp. 4.

Presents the costs of the Highways Department of the City of Westminster for three fiscal years, 1906, 1910, and 1913. The average cost per ton for motor work was 2s. 9.28d., hired horse work, 3s. 4.99d., and city horse work, 3s. 10.12d.

CLARK, P. G. *Hints to accountants, liquidators and receivers on office and factory control.* Accountant, Sept. 13, 1913. Pp. 8.

A suggestive paper on various matters, especially as to how the typewriter may be used for time saving in accounting, and how the purchase and sales books may be adopted for cost keeping.

FISHER, E. L. I. *Determination of probable operating revenue.* II. *Estimating operating expense and cost of construction.* III. *Hypothetical electric interurban railway.* Elec. R. R. Journ., Aug. 23, Sept. 6, 20, 1913. Pp. 8, 6, 3.

A study of how the profitableness may be estimated in the case of a proposed electric interurban railway. Article I, based on typical existing lines, shows how revenue is related to the number and class of population served; II gives the minimum and average operating expenses and construction costs for typical selected lines; in III, special cases are assumed, and the profitableness is estimated according to the conclusions in I and II.

FISHER, L. D. *Office efficiency as it affects the men.* Journ. Account., July, 1913. Pp. 14.

A general but clear and suggestive discussion. Considers especially space requirement and arrangement, lighting and ventilation, facilities for comfort and well-being, classification of employees, and provision for advancement.

HAYES, R. V. *Original cost versus replacement cost as a basis for rate regulation.* Ry. Age Gaz., Sept. 12, 1913. Pp. 3.

Argues that actual cost figures should be used to supplement replacement cost figures in fixing valuations for rate making.

KEELY, R. R. *Overhead expense distribution.* Journ. Am. Soc. Mech. Engrs., June, 1913.

Discusses methods used in handling indirect expense in manufacturing costs.

McKAY, C. W. *Modern practice in manufacturing plant appraisal.* Mach., May, 1913.

MACLANE, H. F. *Methods of determining shop costs.* Elec. Journ., June, 1913.

Third of a series of articles on works management.

MANN, J. *Notes on the organization of the collector's department of the city of Glasgow.* Accountant, July 12, 1913. Pp. 9.

MONTGOMERY, R. H. *The fallibility of unverified financial statements.* Journ. Account., July, 1913. Pp. 10.

PATTERSON, C. H. *The appointment of the central establishment expenses of local authorities.* Accountant, July 26, 1913. Pp. 5.

RICKARD, T. H. *The valuation of mines.* Min. & Sci. Pr., May 24, 1913.

THULIN, F. *Scientific analysis of accounts.* Bankers' Mag., Aug., 1913. Pp. 5.

Attempts to show that an account whose balance is due to discounts is not profitable.

TOWLER, K. F. *Cost accounting.* Stone & Webster Pub. Serv. Journ., Aug., 1913. Pp. 6.

A very general article on the aims and methods of cost accounting.

TRENKERT, G. and L. *Wertberechnung und Wirtschaftlichkeit in der Giesserei.* Stahl u. Eisen, Apr. 24, 1913.

WILGUS, W. J. *Physical valuation of railroads.* Pro. Am. Soc. Civ. Engrs., May, 1913.

Favors the principle of cost of reproduction.

C. P. A. laws. Journ. Account., July, 1913. Pp. 13.

A summary of the C. P. A. laws of Delaware, North Carolina, North Dakota, and Wisconsin.

The Dominion Association of Chartered Accountants. Accountant, Sept. 27, 1913. Pp. 7.

A summary of the proceedings and addresses at the meeting of the association at Winnipeg, Sept. 2-4, 1913.

Fundamentals of valuation of public utilities. Ry. Age Gaz., Sept. 12, 1913.

A survey of the development of the theory.

Tramway finances. Accountant, Aug. 16, 1913. Pp. 4.

Discusses depreciation and renewals in connection with the increasing competition of tramways with motor omnibuses.

Valuation of iron mines. Discussion of the paper of James R. Finlay. Bull. Am. Inst. Min. Engrs., May, 1913.

Valuation of steam railroads. Engg. Rec., June 14, 1913.

Public Utilities

BALDWIN, H. DE F. *On the valuation of water works' special franchises.* Am. Water Works Assn., June, 1913.

- EASTMAN, J. B. *The public service commission of Massachusetts.* Quart. Journ. Econ., Aug., 1913. Pp. 8.
- ERICKSON, H. *The regulation of public utilities in Wisconsin.* Journ. W. Soc. Engr., May, 1913.
- HAYES, H. V. *The public's financial interest in public utilities.* N. Am. Rev., Sept., 1913.
- PENDLETON, E. H. *Cincinnati's traction problems.* Nat. Munic. Rev., Oct., 1913. Pp. 12.
- ROEMER, J. H. *Commission control of public utilities.* Elec. Wld., Sept. 13, 1913.
- ROSE, J. D. *Seattle's municipal light and power plant.* Munic. Journ., Aug. 7, 1913.
- SILCOCK, E. J. *The valuation of water-works undertakings on transfer to municipal authorities.* Surveyor, June 13, 1913.
- WALL, E. E. *A study made to determine equitable water rates for the city of St. Louis, Mo.* Engg. & Con., May 28, 1913.
- WILCOX, D. F. *The New York subway contracts.* Nat. Munic. Rev., July, 1913. Pp. 18.
- Analysis of the premises adopted and methods used in determining the cost to reproduce new, together with the depreciation thereon of the physical property of the metropolitan system and the Kansas City and Westport Belt Railway of Kansas City, Mo.* Engg. & Con., May 28, 1913.
- Bibliography on valuation of public utilities.* Pro. Am. Soc. of Civ. Engrs., Aug., 1913.
- Decision of board in Cleveland case.* Elec. Ry. Journ., June 28, 1913.
- Fixing the rate schedule.* Stone & Webster Pub. Serv. Journ., July, 1913. Pp. 13.
- Pennsylvania public service company law.* Ry. Age Gaz., Aug. 29, 1913.
- San Francisco municipal railway.* Elec. Ry. Journ., Oct. 11, 1913.
- States having laws creating public service or railroad commissions.* I. B. A. of A. Bull., Sept. 9, 1913.
- Wallingford municipal electric works.* Munic. Journ., Aug. 7, 1913.

Corporations and Trusts

(Abstracts by M. H. Robinson)

- BAKER, J. N. *Amendment of the Sherman anti-trust law.* Georgetown Law Journ., May, 1913.
- MASUERO, F. N. *Il monopolio commerciale del petrolio in Germania.* Giorn. d. Econ., Aug., 1913. Pp. 50.
- Examination of the proposed law by which Germany seeks to curb the power of the Standard Oil Company within her borders.*

NORRA, R. *Il controllo dei servizi pubblici e le "public service commissions" americane*. Rif. Soc., Aug.-Sept., 1913. Pp. 35.

Nature and results of the control of public utilities in the United States.

PAM, M. *Interlocking directorates: the problem and its solution*. Harvard Law Rev., Apr., 1913.

The consolidations called for large sums of cash, and as a result the bankers were elected directors of many companies, hence conflict of interests, industrial vs. financial. Interlocking directorates should be prohibited in some cases, and publicity as to contracts enforced wherever there is danger of such a conflict of interests.

PINER, F. *Petroleum-Monopol oder Kartellgesetz*. Die Bank, Aug., 1913.

Proposes a law regulating combinations and their prices rather than trying the "costly experiment" of an imperial petroleum monopoly.

ROSA, E. B. *The function of research in the regulation of natural monopolies*. Science, Apr., 18, 1913.

Describes the work of the Bureau of Standards in connection with the regulation of gas, electric light and other public utility companies, and argues that the commission method scientifically applied may solve the problem of industrial monopolies.

RYAN, T. F. *Why I bought The Equitable*. N. Am. Rev., Aug., 1913.

A prolix explanation, which may be briefly stated as follows: To put an end to internal quarrels and assist in restoring confidence in the stability of financial affairs.

STIEDA, W. *Altere deutsche Kartelle*. Schmoller's Jahrb., No. 2, 1913.

Contrary to the opinion of the leading German writers, such as Kleinwachten and Schönlauck, the cartel is not a modern institution. As early as 1498 there was organized a full fledged cartel in the coffee trade, and during the next four centuries there were five others in Germany alone.

TSCHIRSCHKY, S. *Internationale Kartelle und private Vereinbarungen*. Weltwirtsch. Archiv, July, 1913.

A short description of sixteen international combinations, in various lines of industry.

VOGELSTEIN, T. M. *Literatur zum Petroleummonopol*. Archiv f. Sozialw., Mar., 1913.

Twenty-eight books, reports, and monographs are reviewed.

Fixed prices versus cut prices. Outlook, Sept. 20, 1913.

Replies to eight questions propounded in an editorial of May 24, 1913; mostly from those maintaining fixed prices and generally favorable to the system.

Ownership of central stations. Elec. World, Sept. 6, 1913.

Shows that 29 per cent of the central stations producing electric current are owned by syndicates, 23 per cent by municipalities, and 48 per cent by independents. In the eastern states the proportion is more favorable to syndicate control and less to municipal.

Petroleum-Monopol. Archiv f. Sozialwis., Mar., 1913.

An excellent article called out by the proposed imperial monopoly of petroleum trade in Germany.

Reports of current income by industrial companies should be required. Com. & Finan. Chronicle, Aug. 23, 1913.

Industrial companies are in the same stage and have the same attitude toward publicity of reports as the railroads of thirty years ago. The stock exchange should insist upon regular and complete reports.

Die Grenzen der Konzentration. Kartell-Rundschau, Mar., 1913.

Difficulties connected with the administration of large concerns prove the most effective barrier to the further growth.

Investments

CONANT, C. A. *Safeguarding the issue of securities.* Com. & Finan. Chronicle, Aug. 30, 1913. Pp. 2.

GUYOT, Y. *Du placement des capitaux.* Journ. des Econ., Oct., 1913.

HAGEMAN, H. A. *The Big Creek development.* Stone & Webster Pub. Serv. Journ., Oct., 1913. Pp. 12.

LEBOY-BEAULIEU, P. *La situation économique et financière aux Etats-Unis.* L'Econ. Franç., June 21, 1913.

Decline in security market not based upon fundamental economic conditions, which continue sound, but rather upon foreign conditions and political agitation.

MITCHELL, W. C. *Security prices and interest rates in 1910-1912.* Journ. Pol. Econ., June, 1913. Pp. 23.

MORAWETZ, V. *Shares without nominal or par value.* Harvard Law Rev., June, 1913.

TARBELL, I. M. *The stock market. II.* American, June, 1913.

THACKARA, A. M. *Regulation of investment securities in Germany.* Daily Cons. & Trade Rpts., Aug. 2, 1913. Pp. 2.

The depreciation of British home investments. Econ. Journ., June, 1913.

A continuation of the article of June, 1912.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

ALEXANDER, F. *Die nebenberuflichen Theatergesellschaften in Deutschland.* Schmollers Jahrb., No. 2, 1913. Pp. 62.

A study of the German amateur theatrical societies in their culture and economic aspects.

BATT, T. *Trade union funds.* Westm. Rev., June, 1913.

BAUER, S. *Fortgang und Tragweite der internationalen Arbeiterschutzverträge.* Ann. f. Soz. Pol. u. Gesetz., III, 1-2, 1913. Pp. 35.

Reviews the history of international labor conferences, and discusses the proposals which are to be laid before the conference of 1913.

BELL, I. F. *The fixing of minimum wages for women by law.* Am. Employer, Sept., 1913. Pp. 7.

All employers of female labor should be required to pay by the piece, and a commission should fix the minimum piece rate.

BOUDIN, L. B. *Der Kampf der Arbeiterklasse gegen die richterliche Gewalt in den Vereinigten Staaten.* Archiv f. d. Geschichte Sozial., IV, 1, 1913. Pp. 85.

Caustic and partisan, but interesting and well-informed analysis of the historical development of the attitude of the American courts toward labor organization. Covers the entire history from the Cordwainers' cases to the Danbury Hatters' case.

BOWLEY, A. L. *Working-class households in Reading.* Journ. Royal Statist. Soc., June, 1913. Pp. 30.

An intensive investigation of the rent paid, number of rooms occupied, relation of number of wage-earners to number of dependents, and earnings and expenditures of 677 working-class households, selected by taking one house in 20.

CARTER, C. F. *The West Virginia coal insurrection.* N. Am. Rev., Oct., 1913. Pp. 15.

Severely criticises the United Mine Workers.

CHURCH, A. H. *Premium, piece work, and the expense burden.* Engg. Mag., Oct., 1913. Pp. 12.

A comparison of various systems of remuneration on the basis of their relation to a reduction in the general expense burden.

CLARK, J. B. *The minimum wage.* Atlantic, Sept., 1913. Pp. 8.

Considers chiefly the practicability of providing emergency employment for those thrown out of work by minimum wage laws.

COLLIER, N. C. *Workmen's compensation acts as thus far considered in American cases.* Central Law Journ., May 16, 1913.

COMPAIN, L. *Les consequences du travail de la femme.* Grande Rev., May 25, 1913. Pp. 13.

COTTER, A. *Safety methods of steel, railway and manufacturing companies.* Engg. Mag., July, 1913. Pp. 17.

An illustrated description of the more important safety contrivances used by the United States Steel Company.

DOMERGUE, J. *Les maladies professionnelles.* Ref. Econ., June 27, 1913.

The proposed French law making employers responsible for compensation in cases of occupational disease would throw the older workmen out of employment.

DOSCH, A. *The I. W. W. What it is.* World's Wk., Aug., 1913. Pp. 22.

EDLMANN, E. *Juvenile labor exchanges and apprenticeship bureaux in Germany.* Contemp. Rev., Aug., 1913.

A discussion of the apprenticeship problem and of the various systems and schemes for its solution.

FESTY, O. *Le mouvement ouvrier à Paris en 1840. I.* Rev. Sci. Pol., July-Aug., 1913. Pp. 13.

Detailed historical account based on original sources.

FRANCKE, E. *Die zweite internationale Arbeiterschuttkonferenz der Industriestaaten Europas. I.* Soziale Praxis, Sept. 25, 1913. Pp. 3.

An account of the first four days' proceedings of the International Conference for the Protection of Labor.

GAEREL, K. *Die englischen Lohnämter.* Soziale Praxis, Sept. 18, 1913. Pp. 4.

Attributes success of the English trade boards to the fact that their conclusions have largely been reached by the votes of the laborers and employers and not by the vote of the chairman.

GARCIN, F. *Etat d'esprit syndicaliste.* Journ. des Econ., July, 1913. Pp. 18.

Describes the growing hardships of the workers in the lace industry at St. Etienne, and criticises the policy of restriction of output recently adopted as a remedy by the lace workers' union.

GELDART, W. M. *Trade unions, trade lists, and the law.* Econ. Rev., Apr., 1913. Pp. 12.

A review of the decision in the case of *Vacher and Sons v. The London Society of Compositors*, in which the question of trade-union responsibility for libel under the provisions of the Trade Dispute Act was discussed.

GERARDIN, E. *Les ouvriers du bâtiment au Chili et en Argentine.* Mus. Soc., Mém. & Doc., July, 1913. Pp. 19.

Interesting description of the differences between Chile and Argentine in the character of the buildings, skill of workmen, rates of pay and extent of labor organization.

GIESBERTS, J. *Wie die Grosseisenindustriellen über die Arbeitszeitverhältnisse ihrer Arbeiterdenken.* Soziale Praxis, Aug. 21, 28, 1913. Pp. 7, 8.

A critical review of a book by Reichert on Sunday work and overtime in the German iron industry.

GILBRETH, F. B. *Units, methods, and devices of measurement under scientific management.* Journ. Pol. Econ., July, 1913. Pp. 13.

Describes the various departments in a scheme of scientific management.

GOMPERS, S. *Russianized West Virginia.* Am. Federationist, Oct., 1913, Pp. 12.

A criticism of labor conditions in the mines and of the governor of the state.

GREGG, A. W. *Casting cleaners' wages on the premium basis.* Foundry, May, 1913.

Explains the method adopted in a large Western steel foundry.

HACHIN, J. *Production et consommation; syndicalisme et coopération.* Mouvement Social, Aug. 15, 1913. Pp. 24.

The ideals of syndicalists and coöperators are contrasted, and recent conflicts between the coöperative stores and the unions of their employees described.

HAYEM, J. *Le deuxième congrès du parti républicain démocratique. Un projet de loi sur le contrat de travail.* Rev. Intern. du Com., June, 1913.

The congress discussed a great variety of economic and social proposals among which were a denunciation of syndicalism and legislation, with reference to collective agreements between laborers and employers.

HEISS, C. *Die Entlöhnungsmethoden in der deutschen Metallindustrie.* Schmollers Jahrb., No. 3, 1913.

A review and resumé of Lohr's recent monograph, *Beiträge zur Würdigung der Akkordlohnmethode im Rheinisch-westfälischen Maschinenbau.*

HOBSON, J. A. *Scientific management.* Sociol. Rev., July, 1913. Pp. 16.

Questions whether the possible increase in earnings will compensate for the mechanization of the workmen.

ISAAC, A. *Le salaire minimum des ouvrières à domicile.* Réf. Soc., Aug. 1, Sept. 1, 1913. Pp. 11, 13.

Stresses the danger of unemployment from radical minimum wage laws, and deprecates any attempt to fix an ideal minimum.

JOHNSTON, R. H. *Select list of references on train crew legislation.* Special Libraries, June, 1913. Pp. 5.

JORNS, A. *Der zweite österreichische Kinderschutzkongress.* Soziale Praxis, Sept. 25, 1913. Pp. 4.

Account of the proceedings of the Austrian Congress for the Protection of Children, held at Salzburg, Sept. 4-6, 1913.

JUON, E. *Lohnfragen in hüttentechnischen Betrieben.* Stahl u. Eisen, June 12, 1913.

A study of the systems of premiums suggested by Taylor and others, with some proposed modifications.

KEIR, D. R. M. *Women in industry.* Pop. Sci. Mo., Oct., 1913. Pp. 7.

Certain physiological effects of factory employment on women workers briefly treated.

KELLOGG, P. U. *Government, people, and labor problem.* Rev. Rev., Sept., 1913. Pp. 10.

The personnel of the new Commission on Industrial Relations, and the problems presented to it.

KING, W. L. M. *How Canada prevents strikes.* World's Wk., Aug., 1913. Pp. 6.

LAUCK, W. J. *Hope of American wage-earner.* N. Am. Rev., July, 1913. Pp. 9.

The first step toward amelioration should consist in the adoption of a policy of restricted immigration.

LAUGHLIN, J. L. *Monopoly of labor*. Atlantic, Oct., 1913. Pp. 10.

The trade unions cannot make real gains by monopolistic measures. Only an increase in productive efficiency can increase real wages.

LEROY, M. *L'indifférence des ouvriers syndiqués en matière politique*. Grande Rev., May 25, 1913. Pp. 19.

LEVINE, L. *Syndicalism in America*. Pol. Sci. Quart., Sept., 1913. Pp. 28.

A useful historical account of the I. W. W. and its predecessors. Emphasizes the independent origin of American syndicalism.

LOUIS, P. *L'état présent du syndicalisme mondial*. Mus. Soc., Mém. & Doc., June, 1913. Pp. 20.

A general resumé of the present position of trade-unionism in all countries with respect to number of members, revenue, and centralization.

MAHAIM, E. *The general strike in Belgium*. Econ. Journ., June, 1913. Pp. 5.

The strike, political in character, began on April 14, and was concluded on April 28. The maximum number of strikers was 400,000. The labor party emerges with enhanced reputation on account of the remarkable control of the working population shown.

MITCHELL, A. A. *The influence of trade unions on wages*. Edinb. Rev., Aug., 1913.

Stresses the limitations on trade-union influence.

MOORE, S. C. *The trades board act at work*. Econ. Journ., Sept., 1913. Pp. 5.

Describes the effects produced in an English village by the fixing of a minimum wage in the ready-made fustian clothing trade.

NELSON, J. *Bonus and rating for works' executives*. Iron Age, May 15, 1913.

Explains system developed by the Royal Typewriter Company, Hartford, Conn.

NEUKAMP, E. *Fabriklehrlinge. Die rechtliche Regelung ihrer Verhältnisse und deren wirtschaftliche Bedeutung*. Schmollers Jahrb., No. 2, 1913. Pp. 23.

Analyzes the present German legislation relating to apprentices in factories, and suggests changes to secure better training.

DE NOUVION, G. *Les organisations de défense patronale*. Journ. des Econ., July, 1913. Pp. 6.

The French employers' associations form a valuable check to the excesses of the syndicalists, but some of the associations have also monopolistic aims.

PEASE, F. C. *The I. W. W. and revolution*. Forum, Aug., 1913. Pp. 15.

The I. W. W. creed stated by a disciple.

DE PEYERIMHOFF, H. *Les charbonnages français*. Mus. Soc., Mém. & Doc., June, 1913. Pp. 26.

Increases in wages in the French coal mines have been accompanied by decline in output. Predicts that the reduction of the working day to eight hours will result in smaller production and higher prices.

POPE, E. H. *Women teachers and equal pay.* Pop. Sci. Mo., July, 1913. Pp. 9.

SCHUBERT, E. R. *Die Organisierbarkeit der Privatangestellten.* Ann. f. Soz. Pol. u. Gesetz., III, 1-2, 1913. Pp. 24.

Discusses the difficulties encountered in organizing the upper classes of wage-earners, that is, clerks, engineers, and foremen.

STEWART, E. *Two forgotten decades in the history of labor organizations 1820-1840.* Am. Federationist, July, 1913. Pp. 7.

A collection of facts showing the extent and character of the labor organization of the period.

STONE, H. W. J. *Labour exchanges in England.* Fortn. Rev., Oct., 1913. Pp. 10.

The exchanges have filled few places, and at a high cost.

THOMPSON, C. B. *The relation of scientific management to the wage problem.* Journ. Pol. Econ., July, 1913. Pp. 14.

The unions should insist on a minimum wage as a basis rate, and on a bonus for the performance of a proper day's work.

VALLEROUX, H. *Où en est la question de l'apprentissage? II.* Réf. Soc., June 16, 1913. Pp. 13.

A general review of the difficulties in reforming the French system of apprenticeship.

VERNEUIL, M. DE. *"L'esprit nouveau" des syndicats anglais; le Ruskin College et le Central Labour College.* Rev. Pol. et Parl., May, 1913.

WOLBLING, P. *Neue Literatur über den Arbeitsvertrag.* Ann. f. Soz. Pol. u. Gesetz., II, 5-6, 1913.

WOLTMANN, A., BRUGMANN, W. *Zur Frage der Arbeits-Verhältnisse in der Grosseisenindustrie.* Stahl u. Eisen, May 22, 1913.

Discussions on the eight-hour day, Sunday and holiday work; labor insurance, pensions, etc.

YOUNG, G. *A national gazette of unemployed.* Engr. (London), Aug. 1, 1913.

A scheme for state action in dealing with the problem of unemployment.

Constructive trade unionism. A symposium. Am. Federationist, Sept., Oct., 1913. Pp. 28, 14.

Brief communications from the officers of some 25 national trade unions describing the advances made by their unions during the past year.

The cost of living. Ann. Am. Acad., July, 1913. Pp. 81.

Part I, entitled "Wage Standards," consists of eight papers chiefly concerned with the minimum wage.

Municipal responsibility for strike damage. Elec. Ry. Journ., Aug. 2, 1913. Pp. 2.

Extracts from the brief filed by counsel for Wells Fargo & Co. in a suit against Jersey City for damages in a strike. The jury gave

damages not only for the injury to the physical property of the company, but also for the injury done its business.

Report of board in dispute between the British Columbia Electric Railway Company and employees. Labour Gaz. (Ottawa), Sept., 1913. Pp. 38.

Working conditions in New York stores. Nat. Civic Federation Rev., July 15, 1913. Pp. 32.

A comprehensive investigation by the Welfare Department of the National Civic Federation into the conditions of employment of 19 firms with 39,000 employers. The wage statistics are based on the pay-rolls of the firms.

Enquête internationale sur le placement. Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1913. Pp. 230.

Reports on employment bureaus, particularly their statistics, from many countries. Interesting article by Beveridge and Fey on the working of the English exchanges.

Rapports sur la statistique du chômage. Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, Apr.-June, 1913. Pp. 200.

Valuable reports on methods of collecting unemployment statistics in all important countries, and general articles on the technique of unemployment statistics by leading authorities.

Prices and Cost of Living

(Abstracts by Henry J. Harris)

BISHOP, A. L. *The high cost of living.* Yale Rev., July., 1913. Pp. 14.

General review of the causes of the rise of prices; "the economic problem of living, for all excepting the very poor and the very rich, is both one of high prices and of an attempt at high living."

BOLLES, A. S. *Gold and prices.* No. Am. Rev., July, 1913.

BONNET, N. *La vie chère en Angleterre.* Réf. Econ., Sept., 1913. P. 1.

Discusses the recent British report on cost of living.

BOUSSAC, E. *La hausse des prix.* Ref. Econ., Aug., 1913. Pp. 2.

An increase in prices has not occurred in transportation rates in France, but is inevitable.

DEL MAR, A. *Future contract prices.* Engr. Mag., Oct., 1913. Pp. 6.

An increase in the rapidity of circulation of money or credit instruments acts on prices in the same manner, though not to the same degree, as an addition to the currency; "such an addition to the means of payment does not act upon the prices of all commodities at once, but in the order of their marketability."

DEL VECCHIO, G. *Nuovidati sul costo della vita in Italia.* Giorn. d. Econ., June, 1913. Pp. 8.

A summary of elaborate official data on the cost of living.

FISHER, I. *La hausse actuelle de la monnaie, du crédit et des prix. Comment y remédier.* Rev. Econ. Pol., July-Aug., 1913. Pp. 16.

Exposition of author's plan for a stabilized currency.

FISHER, I. *The monetary side of the cost of living problem.* Ann. Am. Acad., July, 1913. Pp. 7.

The cost of living problem is primarily a monetary one and the solution is to be found in some method of stabilizing the dollar.

FRANKLIN, F. *High prices and the theorists.* No. Am. Rev., Oct., 1913.

GLIER, L. *Die Preiskurve und das Teuerungsproblem.* II, III. Zeitschr. f. Socialwis., July., Aug., 1913. Pp. 15, 26.

II. In the period 1895 to 1911 the price of hides has increased from 40 to 50 per cent; of vegetable oils, 50 per cent or more; of tin, zinc, and lead, 20 per cent or more; and the author holds that these increases are caused by greater demand and diminishing supply.

III. The prices of wood, cotton, wool, and hemp have risen because the supply has either decreased or not kept pace with the demand; the increase of price of iron ore and coal is due to a number of causes connected with production (wages, supplies, freights, social insurance, etc.).

LANIER, H. W. *Conquering the cost of living.* World's Wk., July, 1913. Pp. 8.

Examples of successful coöperative distribution in New England.

McILRAITH, J. W. *Price variations in New Zealand.* Econ. Journ., Sept., 1913. Pp. 7.

Author gives index numbers for New Zealand prices and compares them with Sauerbeck's index. In New Zealand there was an almost continuous decline from 1865 to 1895; from 1895 to 1912 the movement has been upwards, sharply increasing in recent years.

MORTARA, G. *Numeri indici delle condizioni economiche d'Italia.* Giorn. d. Econ., Sept., 1913.

Compares index numbers of consumption with other numbers such as railway tonnage, production of wheat, etc.

PAYEN, E. *La production, la consommation et les prix des divers métaux durant les dix dernières années: I. Cuivre et plomb.* L'Econ. France., Aug. 2, 1913. Pp. 2.

Review of world's figures for copper and lead from 1903 to 1912.

Die Entwicklung des Preisniveaus und des Getreidebedarfs in Deutschland und England in den letzten Dezennien. Jahrb. f. Nat. Oek., Aug., 1913. Pp. 17.

Tables giving absolute and relative figures for the prices of a long list of commodities from 1870 to 1911, with the earlier years in decennial averages.

Money, Credit, and Banking

(Abstracts by Don C. Barrett)

ANDERSON, C. E. *Hongkong currency reform.* Daily Cons. & Trade Rpts., July 26, 1913. Pp. 3.

ANDREW, A. P. *The cruz of the currency question.* Yale Rev., July, 1913. Pp. 26.

The paramount need is the establishment of a banker's bank, to-

gether with flexible reserve requirements and notes issued, not as an "asset currency," but by some superior banking agency. An excellent article.

BARCLAY, G. R. *The use of cheques in France*. Journ. Soc. Comp. Legis., July, 1913. Pp. 4.

The system of crossing checks under the law of December, 1911.

BENDIXEN, F. and HEYN, O. *Der Kampf um den Geldwert*. Zeitschr. f. Socialwis., Aug. 10, 1913. Pp. 9.

A controversy concerning the merits of Bendixen's *Geld und Kapital*. Largely a war of words. Bendixen holds that Heyn is not warranted in dragging the theory of value into the problem of determining the value of money because money is not a commodity.

BLUM, L. L. *Le crédit populaire*. Rev. Intern. du Com., June, 1913. Pp. 9.

The convention at Limoges in 1911 set on foot a movement for extending bank loans to small business men and farmers, which is profoundly affecting the development of France.

CORRINGTON, M. *The clearing house as a basis for currency issues*. Banking Law Journ., Aug., 1913.

CRUEGER, H. *Die Schulze-Delitzschschen Genossenschaften in Posen ein Bollwerk des Deutschtums*. Mit einem Nachwort von Gustav Schmoller. Schmollers Jahrb., No. 2, 1913. Pp. 16.

Shows the difficulties Germans have in Poland to hold their own against the Poles themselves in ability to use coöperative banks. These banks should not be used for political purposes.

DEL VECCHIO, G. *La questions del cambio*. Rif. Soc., Aug.-Sept., 1913. Pp. 25.

Elimination of alleged factors that are found to be irrelevant makes necessary the admission that the increasing cheapness of paper currency in Italy is due to the excessive issue of paper.

FORD, W. F. *The decreasing value of money*. Fortn. Rev., July, 1913.

Popular presentation of "gold theory" of prices.

GEISSER, A. *La "tutela dei risparmi" e gli emendamenti della giunta generale del bilancio*. Rif. Soc., Aug.-Sept., 1913. Pp. 18.

Shows that the public care of savings as advocated in Parliament involves investment in securities whose principal value is declining.

JOHANNSSEN, N. *Crop notes*. Bankers Mag., 1913. Pp. 6.

Plan for a governmental issue of supplementary notes based on collateral, for crop-moving period.

LAFOND, G. *Le système monétaire de l'Argentine et les organes de la circulation*. Journ. des Econ., Aug. 15, 1913. Pp. 21.

Traces the legal and economic history of paper money in Argentina, and the recent growth and importance of the Argentine Bank.

LANSBURGH, A. *Fünf Jahre Hypothekenbankwesen*. Die Bank, Sept., 1913. Pp. 7.

LANSBURGH, A. *Goldwanderung*. Die Bank, Sept., 1913. Pp. 14.

Discusses suggestions for improvement of means of international

payments. For political, financial, and economic reasons, he rejects both the proposal for replacement of gold by any other metal and for control by a banking system. A third plan will be discussed in a later article.

LANSBURGH, A. *Praktische Geldpolitik. II. Geldwert und Aussenhandel.* Die Bank, June, 1913. Pp. 13.

Analyzes different means proposed for increasing Germany's war-chest. Concludes neither various substitutes for money nor foreign gold loans are practicable. The desired end can be attained only by taxation or by treasury note issue of small denominations.

LUFFT, H. *Die russische Reichsbank im Dienste der russischen Wirtschaftspolitik.* Die Bank, June, 1913. Pp. 14.

Russia's policy of encouraging loans to the peasantry has resulted in grain exports and gold imports, and has strengthened her position in European money markets. Her deposits in other countries, originally forced from her, are now maintained with ease and constitute a source of power in European politics.

McARTHUR, P. *Canadian banking system.* Forum, July, 1913.

The Canadian system has enabled twenty men to control all the important financial, transportation, and industrial interests of Canada. The decennial revision of the bank act is inadequate.

MERRIAM, J. R. *Stories of elastic currency.* World's Wk., Sept., 1913. Pp. 3.

Elementary explanation, by example, of elasticity to be offered by the Glass-Owen bill.

MOSS, R. W. *Money for the farms.* World's Wk., Oct., 1913. Pp. 3.

Privilege of rediscount rather than coöperative organization is the foundation of European agricultural credit. Advocates a system of land mortgage credit for America.

OWEN, R. L. *Currency legislation. Origin, plan, and purpose.* No. Am. Rev., Oct., 1913. Pp. 14.

A survey of currency history since 1900. Detailed outline of the Owen-Glass bill. Considers proposals from Chicago conference of bankers.

SUBERCASEAUX, G. *Das Papiergeld im nationalen und internationalen Zahlungsverkehr.* Weltwirtsch. Archiv, July, 1913. Pp. 8.

Paper currency answers very well for a single country, but in international trade a currency of real value is necessary.

TARBELL, I. M. *Hunt for a money trust.* American, July, 1913.

Articles in this series present an analysis of the testimony from the Pujo committee report.

UNTERMYER, S. *Currency legislation.* No. Am. Rev., Oct., 1913. Pp. 29.

Discusses favorably the underlying principles of the Glass-Owen bill. Suggests amendments.

WARRBURG, P. *Currency legislation. Criticism and suggestions.* No. Am. Rev., Oct., 1913. Pp. 29.

Compares the Owen-Glass bill and the Aldrich plan. Suggests 4 instead of 12 reserve banks, and a plan for dealing with the note issue and the 2 per cent bonds. Favors a federal reserve board.

WESTON, E. M. *Gold production in relation to humanity; a study of the question: has gold depreciated in value?* Journ. Chem., Met. & Min. Soc. of S. Africa, Apr., 1913.

WUTTIG, M. *Zur genossenschaftlichen Zentralkassenbewegung. II. Die Bank*, July, 1913. Pp. 13.

The development of the central bank movement in Germany since the establishment of the Prussian central bank, and its relation to the Raiffeisen system.

Banking customs and banking laws. Journ. Am. Bankers Assoc., July, 1913. Pp. 7.

Illustrates development of the law governing notes, checks, etc. Discusses debatable rules of conduct which confront bankers.

The centralization of the banking system and the banks for special credit. Bull. Econ. & Soc. Intelligence, Sept., 1913. Pp. 6.

Evidences of the movement in Japan toward combining independent banks as branches under large institutions.

English banks and foreign deposits. Economist, Sept. 20, 1913. P. 1.

Arguments for and against the extension of English banking through foreign branches.

Financial services auxiliary to the work of the postal savings banks. Bull. Bur. Econ. & Soc. Intelligence, Aug., 1913. Pp. 10.

Among other services, these banks are extending the use of checks among small business men in Europe.

The postal savings banks. Bull. Bur. Econ. & Soc. Intelligence, July, 1913. Pp. 9.

Organization in Japan, amount of business in the country and in provinces. Distribution of savings according to callings.

Progress of international postal savings bank and the interests of agriculture. Bull. Bur. Econ. & Soc. Intelligence, Aug., 1913. Pp. 43.

A comparative study of character and functions of such banks in several countries. It is impossible to state whether agricultural loans represent the proportion of savings made by agricultural classes.

Recent gold coinages of the world. Bankers Mag., Aug., 1913. Pp. 6.

Growth of coinage, its effects on prices and on England's position as financial center.

Twenty-first annual meeting of the United States League of Local Building and Loan Associations. Am. Bldg. Assoc. News, Aug., 1913.

Who owns the banks? Com. & Finan. Chronicle, Aug. 23, 1913. P. 1.

A typical national bank exemplifies widely scattered ownership of shares.

Les opérations des caisses d'épargne. L'Econ. Franç., Aug., 1913. Pp. 3.

A statistical statement of the condition of French savings banks.

Public Finance

(Abstracts by C. C. Williamson)

ANDREADES, A. *Le régime fiscal des successions en Grèce*. Mouv. Econ., Aug.-Sept., 1913. Pp. 16.

BAMBERGER. *Erbschaftsteuer*. Grenzboten, No. 2, 1913. Pp. 3. .

BONNARD, R. *Les finances de guerre*. Rev. Sci. Légis. Finan., Apr.-May-June, 1913. Pp. 48.

A general article on war financing. Formulates the principles governing the use to be made of the war reserves, taxes, and loans.

BOUGIN, E. *La réfection du cadastre*. Réf. Econ., Apr. 4, 1913. P. 1.

The tax maps, or cadasters, now in use in France were prepared so long ago that they have become exceedingly inadequate. In spite of the great expense involved, a referendum vote recently taken in a given commune was almost unanimous for reconstruction of the cadasters.

BOURLIER, A. *Les dettes communales en Allemagne*. Nouvelle Rev., 1913. Pp. 8.

BOUVIER, E. *Chronique financière étrangère (Japan)*. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 14.

BROUSSE, E. *Le contrôle de la cour des comptes sur les dépenses publiques*. Rev. Pol. et Parl., Aug., 1913. Pp. 10.

BROUSSE, E. *Nos pratiques budgétaires*. L'Econ. Franç., Aug. 9, 1913. Pp. 2.

Faulty budgetary methods are held to be one of the principal causes of the formidable increase in expenditures. Calls for a more strict legislative control over executive officers.

BROUSSE, E. *La spécialité des crédits budgétaires*. L'Econ. Franç., Oct. 4, 1913. Pp. 2.

A discussion of parliamentary control over the execution of the budget. The problem of using a highly segregated budget without interfering with administrative effectiveness.

BRYAN, G. J. *Advance in tax laws in Canada*. Single Tax Rev., Oct., 1913. Pp. 8.

CARONCINI, A. *La nuova tariffa doganale americana*. Rif. Soc., June, July, 1913. Pp. 20.

CLARKE, E. F. *Memorandum in relation to amendment sought to pending income tax bill*. Real Estate Mag., May, 1913. Pp. 6.

CONANT, C. A. *The return to hard money*. Century, July, 1913. Pp. 18.
The finances of the Civil War.

COX, H. *The Lloyd Georgian land taxes*. Edinb. Rev., Aug., 1913. Pp. 21.

A hostile criticism of the land tax introduced by the budget of 1909.

DEPUICHAULT, R. *Le budget de la guerre a la douma*. Rev. Pol. et Parl., July 10, 1913. Pp. 6.

DULONG, H. *La dette ottomane et les états balkaniques*. Rev. Intern. du Com., June, 1913. Pp. 16.

Turkey first succeeded in raising a foreign loan after the Crimean War in 1854. By 1875 nearly all her revenues were being absorbed by the debt service, and from that time on Turkey, though still negotiating foreign loans, disregarded her obligations at will, driving foreign bondholders to organize in self-protection. Historical data are drawn from L. Depüis, *Le controle financier de la dette publique ottomane* (Paris, 1908). The credit of the Ottoman Empire at present depends on the extent to which the Balkan states are compelled to share the Turkish debt. 80 per cent of Turkish securities are in the hands of French investors.

ESCHWEGE, L. *Aus der Praxis des privaten Taxwesens*. Die Bank, July, 1913. Pp. 7.

Points out the ill effects of clumsy and inexact methods of valuation of real estate.

EULAMBIO, M. S. *The history and finances of modern Greece*. Economist, Sept. 20, 1913. P. 1.

A letter to the editor of the "Economist" explaining the financial difficulties of Greece.

EVANS, J. *Capital and income under the income tax act*. Law. Quart. Rev., Apr., 1913. Pp. 16.

GERLOFF, W. *Die Wertzuwachsteuer in Literatur und Gesetzgebung*. Schmollers Jahrb., No. 3, 1913. Pp. 13.

A critical survey of the literature of the unearned increment tax, covering 17 titles published since 1909.

GIPFEL, M. *Die portugiesischen Anleihen*. Jahrb. f. Nat. Oek., Aug., 1913. Pp. 12.

The finances of Portugal, with special reference to the experience of German investors with Portuguese government securities, from the first of the four bankruptcies in 1826 to the existing republic.

GONACHOU, A. *Suppression des droits de mutation sur les legs et libéralités fait aux établissements charitables*. Rev. Philan., July, 1913. Pp. 10.

Gifts to charitable institutions, such as hospitals, are subject to an inheritance tax. This article reviews the case in favor of their exemption.

GOODNOW, F. J. *Congressional regulation of state taxation*. Pol. Sci. Quart., Sept., 1913. Pp. 28.

Multiple taxation of the same property by different states has become so great an evil that the United States Supreme Court has come to consider such action as a taking of property without due process of law. Professor Goodnow makes the interesting suggestion that, in view of the difficulty of avoiding double taxation by means of voluntary coöperation among the states, Congress might by statute define what sort of state taxes constitute a taking of property without due process of law, basing such a statute on the fifth section of the

fourteenth amendment, which gives Congress "power to enforce, by appropriate legislation, the provisions of this article."

GRUNWALD, P. *Aufgaben und Mittel der staatlichen Verwaltung der direkten Steuern in Österreich*. Zeitschr. f. Volkswirtsch., XXII, 2-3, 4-5, 1913. Pp. 143.

These two articles represent an expanded form of lectures delivered for the Independent League for Economic Education in Brünn and Vienna in the autumn of 1912.

GUYOT, Y. *Le budget de 1913 en France*. Rev. Econ. Intern., July, 1913. Pp. 30.

HAUSSER, G. *Les finances brésiliennes*. Rev. Econ. Intern., June, 1913. Pp. 23.

HENNESSY, C. O. *Home rule in taxation*. Am. City, Aug., 1913. Pp. 2.

A letter to the editor in support of exemption of improvements.

HUART, A. *Le problème budgétaire et l'expansion des forces économique de la France*. Rev. Econ. Intern., July, 1913. Pp. 32.

AN ITALIAN CORRESPONDENT. *Italian finance*. Economist, Sept. 20, 1913. P. 1.

JEZE, G. *La loi anglaise sur le recouvrement provisoire des impôts*. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 24.

Although the English fiscal year begins April 1st, it has not been customary for Parliament to give full legal sanction to the income tax until several months have elapsed. In the meantime, acting under the authority of a resolution by the Committee of Ways and Means of the House of Commons, the fiscal agents have proceeded to levy and collect the tax. In 1912, however, Mr. Gibson Bowles succeeded in obtaining a judicial decision restraining the Bank of England from collecting the income tax before the tax was regularly voted by Parliament. This made necessary the Provisional Collection of Taxes Act of 1913, which gives statutory effect to the resolution of the Committee of Ways and Means.

JEZE, G. *Le projets financiers du gouvernement pour couvrir les dépenses militaires*. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 14.

Discussion of proposals for solving the difficult problem of meeting the heavy expenditures caused by the present Franco-German rivalry.

KOUSTAM, E. M. *Land values taxation; a criticism of the evidence before the parliamentary committee on imperial and local taxation*. Transactions of Surveyor's Inst., session of 1912-1913. Pp. 42.

LADON. *Zuwachssteuern*. Zunkunft, July 5, 1913. Pp. 4.

LANSBURGH, A. *Der Staat und die Auslandsanleihen*. Die Bank, July, 1913. Pp. 15.

The question of allowing German capital to flow into foreign investment channels to the detriment of the market for German government securities.

LEBOY-BEAULIEU, P. *Les plus-values d'impôts*. L'Econ. Franç., Sept. 13, 1913. Pp. 2.

At the present rate the tax revenues of France for the current year will exceed calculation by 230 millions of francs.

LEROY-BEAULIEU, P. *Les projets financiers en vue.* L'Econ. Franç., Aug. 16, 1913. Pp. 3.

LEROY-BEAULIEU, P. *La revision des cours des valeurs mobilières.* L'Econ. Franç., June 14, 1913. Pp. 3.

A search for the causes of the world-wide depression in security markets. Among the principal causes found are: strained international relations, administrative mismanagement, and confiscation of private wealth by taxation instead of borrowing. The first article, devoted to government securities, reviews the history and present state of the interest rate on government securities for the principal countries of the world.

LEROY-BEAULIEU, P. *La situation financière: les sophismes de M. Caillaux.* L'Econ. Franç., Aug. 2, 9, 16, 1913. Pp. 2, 3, 3.

An attack on M. Caillaux based chiefly on his advocacy of an income tax. The second article discusses M. Caillaux's "bluff," which was his estimate that 800 million francs new revenue would be needed for the 1914 budget. That amount could be reduced by half, says M. Leroy-Beaulieu, by simply eliminating waste.

LEVY, G. *Les armements financiers de la France et de l'Allemagne.* Rev. Deux Mondes, July 15, 1913.

MACLER, M. *Rapport au sénat sur le budget des postes et télégraphes.* Journ. des Econ., July, 1913. Pp. 11.

Quotes at length parts of the report comparing the French with the German, Swiss, and English postal service, showing the general inferiority of the French system. Inferior service, demoralized personnel and crude financial methods all inhere, M. Macler holds, in government enterprises.

MAPTUP. *La première session de la commission financière balkanique.* Journ. des Econ., Aug. 15, 1913. Pp. 12.

Was occupied with the problem of protecting creditors of Turkey, Servia, Bulgaria, and Greece by an equitable distribution of the cost of the war and the pre-existing Turkish debt.

LE MARQUIS DE MIRABEAU. *Bref état des moyens pour la restauration de l'autorité du roi et de ses finances, avec des notes de François Quesnay; publié par G. Weulersse.* Rev. d'Hist. Econ., No. 2, 1913.

An hitherto unpublished manuscript from the pen of the founder of the Physiocratic school, apparently written between 1757 and 1760. It furnishes to students of economic thought, among other things, an epitome of the theory of *produit net* and an argument against consumption taxes.

MEANY, W. J. *Railway taxation.* Ry. World, Aug., 1913. Pp. 2.

Dwells at length on the increase of railway taxation in proportion to gross and net revenue, the railways at the same time being forbidden to increase their rates. Suggests that railroad managers would welcome

taxation by some national board working in harmony with the Interstate Commerce Commission.

MEISSINGER, H. *Die Gebühren des kommunalen Haushalts, mit besonderer Berücksichtigung Hessens*. Finanz-Archiv, No. 2, 1913. Pp. 73.

Discusses in a general way the fundamental legal relations between state and municipality and the financial powers of the latter, with a history of the development of the *Finanzgewalt* in Hesse. The principal feature of this article (to be continued) is an elaborate definition of the fee and the place of fees in Hessian municipal finance.

MELTZING, O. *Die Wirkung der neuen Steuervorlagen auf die deutsche Privatversicherung*. Oesterr. Zeitschr. f. öffentliche und private Versicherung, IV, No. 1, 1913. Pp. 14.

MONEY, L. G. C. *Social legislation and the usury obsession*. New Statesman, Aug. 30, 1913. Pp. 2.

Advocates paying for certain social improvements (houses for the poor) by taxation rather than by borrowing, on the ground that the interest on the loans would impose a hardship on the "poor working man."

MOORE, C. S. *The super tax*. Law Quart. Rev., Jan., 1913. Pp. 11.

MUZET, A. *La serbie au lendemain de la guerre*. Journ. des Econ., Sept. 1913. Pp. 6.

Opinions of a first-hand observer as to the effect of the Balkan war on Servia's financial condition.

OUTHWAITE, R. L. *Cities as farm centres! How urban land escapes the rates*. Land Values, Aug., 1913. Pp. 2.

A review of a parliamentary report showing the extent to which land is held idle and escapes taxation in the populous urban centers of England. An argument for rating reform.

PARKER, G. *Land reform and the chancellor*. Nineteenth Cent., Aug., 1913. Pp. 10.

Opposed to the land policy of Lloyd George.

VON POZZI, V. R. *Ueber die Ursachen der hohen italienischen Rentenkurse*. Zeitschr. f. Volkswirtsch., XXII, No. 3-4. Pp. 8.

Seeks an explanation for the remarkable fact that Italian government securities have not declined in spite of war and other untoward conditions.

RADUSCH, A. *Zur Beurteilung der Höhe der Postüberschüsse und ihrer Verwendung*. Finanz-Archiv, No. 2, 1913. Pp. 60.

In Germany, as in the United States, the question has been raised as to whether the post office really pays its way. This article aims to show that the German post office earns a real net surplus, and discusses many of the more intricate details of financial administration.

RAUDNITZ, J. *Die Entwicklung der serbischen Staatsfinanzen*. Finanz-Archiv, No. 2, 1913. Pp. 46.

In spite of the widespread interest in the affairs of Servia, no de-

tailed and first-hand study of her finances has hitherto been published. This study, the result of original investigation, treats of the sources of income, objects of expenditures, etc. Expenditures grew from 78,000,000 m. in 1902 to 114,648,700 m. in 1911.

RAUDNITZ, J. *Die Staatswirtschaftliche Entwicklung Bulgariens*. Zeitschr. f. Volkswirtsch., XXII, No. 3-4. Pp. 33.

A survey of Bulgarian finance, covering the tax system; sources of non-tax revenue, expenditure, and debt.

REED, R. R. *Analysis of the amended income tax bill*. Trust Companies, Aug., 1913. Pp. 3.

"Features of application in which trust companies and investors are especially interested."

ROBERTSON, M. *An interesting budget statement*. Contemp. Rev., Sept., 1913. Pp. 11.

ROOT, C. T. *Not a single tax!* Am. City, July, 1913. Pp. 3.

A brief exposition of the single tax philosophy.

ROTTACH, E. *Les finances de la république chinoise*. Rev. Pol. et Parl., June, 1913. Pp. 16.

ROUME, E. *De la nécessité de l'emprunt de l'Afrique équatoriale française*. Rev. Pol. et Parl., July, 1913. Pp. 18.

VON SCHANZ, G. *Die bayerische Schuldentilgungspolitik*. Finanz Archiv, No. 2, 1913. Pp. 15.

A thorough analysis of the Bavarian public debt and the policy of debt payment. The net debt has been increasing rapidly since 1902.

SCHWARZ, O. *Die Finanzen der europäischen und der wichtigeren aussereuropäischen Staaten*. Finanz-Archiv, No. 2, 1913. Pp. 114.

A review covering 1911 and 1912 so far as the data are available.

SEGNER, F. *Bibliographie der finanzwissenschaftlichen Literatur für das Jahr 1912 (mit Ausschluss des Zollwesens)*. Finanz Archiv, No. 2, 1913. Pp. 21.

Reasonably complete for German states, but for England and especially for the United States is of no value at all.

SIEBERT, A. *Ueber Erwerbseinkünfte in Einnahmesystem des Grossherzogtums Baden*. Zeitschr. f. d. ges. Staatsw., No. 2, 1913. Pp. 22.

Nearly 10 per cent of the net revenue of Baden is derived from industrial undertakings of one sort or another, including forests, domains, salt works, state brewery, etc. Taxation having reached its practical limits, new and urgent wants must be met by increasing this class of revenues.

SMITH, H. *Die Steuerreform in Dänemark in 1911-1912*. Finanz-Archiv, No. 2, 1913. Pp. 13.

Denmark, in common with most other countries of western Europe, has in recent years secured notable tax reforms. In 1903 a radical reform in direct taxes, and in 1908 tariff and excise taxes. These reforms, however, so reduced the revenues that it was necessary both to reduce expenditure and to seek new sources of revenue. An "economy"

committee found a way of reducing the budget and by various new indirect taxes and increased rates for the direct an increase of 21 per cent was realized in two years.

STAMP, J. C. *Incidence of increment duties*. Econ. Journ., June, 1913. Pp. 12.

An examination of conflicting opinions in regard to the extent to which increment taxes to be levied in the future fall on present owners. Concludes that a tax on true increment, or windfall, is hardly "shiftable" at all.

STREET, A. L. H. *Some legal aspects of the sale of municipal bonds*. Am. City, July, 1913. Pp. 2.

SZTERENYI, J. *Die ungarische Industriepolitik*. Zeitschr. f. Volkswirtsch., XXII, No. 2-3, 1913. Pp. 40.

TREVISONNO, N. *Per un sistema d'imposte sul reddito consumato*. Giorn. d. Econ., Sept., 1913. Pp. 18.

VIRTUE, G. O. *Mortgage taxation in Nebraska*. Quart. Journ. Econ., Aug., 1913. Pp. 4.

Takes up some of the complications produced by an act of 1911, making mortgages an interest in the land and taxable to the mortgagee, the mortgagor being permitted to assume the whole burden. Difficulties have arisen in regard to mortgages held by state banks.

WECK. *Die Beweglichkeit der Gemeindegrundsteuer in Preussen*. Finanz-Archiv, No. 2, 1913. Pp. 11.

WEDGWOOD, J. G. *Principle of land value tazation*. Econ. Journ., Sept., 1913. Pp. 10.

A reply to the article by C. F. Bickerdike in the March number of the "Economic Journal" (cf. REVIEW, vol. II, no. 4, p. 977). The author is a member of Parliament who favors the taxation of land values not as a prosperity policy, but as a corrective of injustice.

WYNNE-ROBERTS, R. O. *The financing of municipal works. Comparison of Canadian, British and South African methods*. Canad. Engr., Aug. 14, 1913. Pp. 3.

The finances of Japan. Economist, Sept. 6, 1913. P. 1.

"If Japanese credit is to be restored, a policy of retrenchment must be seriously pursued, and the burden of the national debt lightened with all speed."

Real estate and the income tax. Real Estate Mag., June, 1913. Pp. 3.

Real estate interests throughout the country protest against the stoppage-at-the-source method of collecting the income tax.

A report on the constitutionality of exempting securities from taxation, on taxing them at a lower rate than tangible property in the various states. Bull. Invest. Bankers Assn. of Am., Aug. 29, 1913. Pp. 38.

Gives the constitutional provisions directly affecting the classification of property for taxation for every state, except Arizona and New Mexico, with citation of court decisions interpreting them. Provisions relating to exemption are also given for the reason that by a general

rule of interpretation specific exemptions preclude the legislature from making other exemptions.

The single tax. Outlook, Sept. 20, 1913. Pp. 3.

A review of the world-wide movement toward exempting improvements and increasing the tax on land values.

Application des règles budgétaires. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 16.

Le budget de la ville [de Paris] pour l'exercice 1913. Bull. Stat. Legis. Comparée, Apr., 1913. Pp. 4.

China's reorganization loan. A brief history of the negotiations. Far Eastern Rev., May, 1913. Pp. 8.

Les contrôles budgétaires. Rev. Sci. Legis. Finan., Apr.-May-June, 1913. Pp. 16.

Points out the inefficiency of the present machinery, including the *cour des comptes*, for preventing irregularities in execution of the budget, particularly the payment of money without the sanction required by law. The whole system of the budgetary control is declared to be a sham.

Le dépenses militaires de la France depuis, 1870. Bull. d. Stat. Legis. Comparée, May, 1913. Pp. 2.

Gives table of expenditures on army, navy, and pensions each year since 1870.

La dette publique ottomane et les états Balkaniques. Mouv. Econ., June 1, 1913. Pp. 4.

L'exploitation du monopole des tabacs. L'Econ. Franç., Aug. 9, 1913. Pp. 3.

Les impôts et revenus de l'état depuis 1871. Bull. Stat. Legis. Comparée, Mar., 1913, Pp. 7.

A valuable statistical compilation.

Les monopoles fiscaux et le principe de l'indemnité. Rev. Sci. Legis. Finan., Apr.-May-June, 1910. Pp. 7.

The suggestion of new fiscal monopolies to meet increasing expenditures brings up the question of indemnifying persons financially injured thereby. M. Klotz, minister of finance, holds that the state would be under obligation to pay such an indemnity.

La situation financière des communes en 1912. Bull. Stat. Legis. Comparée, May, 1913. Pp. 15.

Tariffs and Reciprocity

(Abstracts by Henry R. Mussey)

BENZACAR, J. *Ligue du libre-échange: conférence du 14 avril: le coût de la vie et le protectionnisme.* Rev. Econ. Bordeaux, Apr.-May, 1913. Pp. 18.

The ordinary argument of the orthodox French free-trader that protection has increased the cost of living. Illustrated by several diagrams.

FORETMANN, J. *Statement regarding new Underwood tariff bill with special reference to schedule K.* Bull. Nat. Assoc. Wool Mfrs., June, 1913. Pp. 15.

A rather bitter complaint against the Underwood bill, which is assailed with the arguments ordinarily current among the woolen manufacturers.

HOLLANDER, J. W. *Der deutsche Zolltarif von 1902.* Schmollers Jahrb., No. 3, 1913. Pp. 66.

The conclusion of a detailed study of the passage of the German tariff of 1902, giving its legislative history.

JONES, J. H. *Dumping and the tinplate industry.* Econ. Journ., June, 1913. Pp. 12.

Dumping furnished an incentive to the formation of the Siemens Bar Association, but did not cause its success. It thus hastened integration and helped change the organization of the bar and plate industries. There is a possibility of control of tinplate prices in future.

MAGNAN, L.-J. *La France et la révision du tarif américain.* Rev. Intern. du Com., June, 1913. Pp. 14.

A review of American policy as affecting France. Considers the Underwood bill as conceived in our traditional spirit of protection. France suffers especially as her exports to us are mostly luxuries. Retaliation, nevertheless, is impossible.

MARVIN, W. L. *A radical revision downward. The woolen schedule of the Underwood bill a grave menace to the industry.* Bull. Nat. Assoc. Wool Mfrs., June, 1913. Pp. 4.

A note of warning from the secretary of the National Association of Wool Manufacturers.

PAGE, T. W. *The tariff and the woolen industry.* Bull. Nat. Assoc. Wool Mfrs., June, 1913. Pp. 15.

A careful and judicial review of the progress of the woolen industry, and a consideration of the reasons for our inferiority in that branch of manufacture. Economically, the industry is a failure. Is it worth while otherwise?

The new tariff in House and Senate. Bull. Nat. Assoc. Wool Mfrs., June, 1913. Pp. 48.

A history of the Underwood bill up to the end of May, with special reference to the wool and woolens schedule. Gives the arguments of the woolen men against the bill.

Insurance and Pensions

AUDINET, E. *Le monopole des assurances sur la vie en Italie et le droit des étrangers.* Rev. Droit Intern. Public., 1913. Pp. 18.

BAUM-DUESSELDORF, M. *Mutter- und kinderschutz in der Reichsversicherungsordnung.* Soziale Praxis, Sept. 4, 1913. Pp. 33.

BELLOM, M. *La loi anglaise d'assurance sociale de 1911.* Journ. des Econ., June, 1913. Pp. 19.

- BELLOM, M. *Les premiers résultats de la nouvelle loi anglaise d'assurance sociale. I. II.* Journ. des Econ., Aug. 15, Sept. 15, 1913. Pp. 14.
- BRANDT. *Der Ersatz der Kosten des Heilverfahrens.* Zeitschr. f. d. ges. Versicherungswis., Sept., 1913. Pp. 5.
- CUNNINGSON, J. *The incidence of national insurance contributions.* Econ. Journ., Sept., 1913. Pp. 7.
- DEVINE, E. T. *Pensions for mothers.* Survey, July 5, 1913. Pp. 4.
- DOERSTLING, *Die Versicherungspflicht im Privatrecht. I.* Zeitschr. f. d. ges. Versicherungswis., Sept., 1913. Pp. 24.
- HALSTEAD, A. *Medical benefits of British insurance act.* Daily Cons. & Trade Rpts., July 8, 1913. Pp. 2.
- HOECKNER. *Nettokosten und Kostenvergleichen in der Lebensversicherung.* Zeitschr. f. d. ges. Versicherungswis., July, 1913. Pp. 13.
- HUNTER, A. *The medico-actuarial investigation of the mortality of American and Canadian life assurance companies.* Journ. Inst. Actuaries, July, 1913.
- HUTH, G. *Die Grundzüge der britischen Nationalversicherung von 1911.* Schmollers Jahrb., No. 2, 1913. Pp. 14.
- KIRCHMANN. *Wesen und Wirkung der unwiderruflichen Bezugsberechtigung beim Lebensversicherungsvertrag.* Zeitschr. f. d. ges. Versicherungswis., July, 1913. Pp. 11.
- LODGE, W. *A pension plan for employees in the machinery trades.* Ind. Engg., July, 1913.
- MANES, A. *Die internationalen Verflechtungen des Versicherungswesens. Ein Ueberblick.* Weltwirtsch. Archiv, July, 1913.
- MONDET, N. *Résultats des assurances sociales en Allemagne.* Journ. des Econ., July, 1913.
- MONEY, L. G. C. *National insurance and labour unrest.* Fortn. Rev., Oct., 1913.
- RENFER. *Die Reserven der Aktiengesellschaften für Sachversicherung. I.* Zeitschr. f. d. ges. Versicherungswis., Sept., 1913. Pp. 37.
- RUBINOW, I. M. *Accident compensation for federal employees.* Survey, Aug. 16, 1913.
- STIER SOMLO, S. *Social insurance of agricultural labourers against sickness.* Mo. Bull. Econ. & Soc. Intelligence, July, 1913. Pp. 15.
- ULRICH. *Ein Beitrag zur analytischen Ausgleichung von Sterbetafeln.* Zeitschr. f. d. ges. Versicherungswis., Sept., 1913. Pp. 21.
- WILLIAMS, F. *Insurance that prevents fire.* Wlds. Wk., Oct., 1913.
- Life insurance and legislation on small holdings and cheap dwelling houses.* Mo. Bull. Econ. & Soc. Intelligence, Aug., 1913. Pp. 9.
- National insurance and national character.* Edinburgh Rev., Aug., 1913.
- Social insurance.* Am. Labor Legis. Rev., June, 1913. Pp. 131.

Contains proceedings of first American Conference on Social Insurance held in June, 1913. Among the papers published are: "Sickness insurance," by I. M. Rubinow; "Insurance against unemployment," by C. R. Henderson; "Pensions for mothers," by E. T. Devine; "Old age insurance," by F. S. Baldwin; "Systems of wage-earners' insurance," by F. L. Hoffman. Various aspects of workmen's compensation are discussed by T. J. Duffy, P. T. Sherman, and Miles Dawson. There is also a 6-page bibliography on social insurance.

Les opérations de 1912 concernant la loi sur les retraites ouvrières. L'Econ. Franç., Aug. 23, 1913. Pp. 2.

Population and Migration

(Abstracts by William B. Bailey)

ACKLAND, T. G. *On the estimated age-distribution of the Indian population, as recorded at the census of 1911, and the estimated rates of mortality, deduced from a comparison of the census returns for 1901 and 1911.* Journ. Inst. Actuaries, July, 1913. Pp. 100.

A valuable article, showing the method by which the age curve of the Indian population was smoothed, and an attempt made to form a life table for the population of those provinces.

BERTILLO, J. *Occupational mortality and causes of death.* Quart. Pubs. Am. Stat. Assoc., June, 1913. Pp. 9.

The translation of the introduction to the address at the International Congress on Hygiene and Demography dealing almost entirely with the difficulties attending a study of mortality and the causes of death by occupations.

CLARK, V. S. *"Gresham's Law" as applied to immigration to Hawaii.* Quart. Pubs. Am. Stat. Assoc., June, 1913. Pp. 3.

It appears from a study of the European and Asiatic men competing in the labor market of Hawaii from 1905 to 1912 inclusive, that, as the number of Asiatic men increased by immigration, the departures of Spanish and Portuguese men for California increased.

DAURE, L. *Le Néo-Malthusisme: ses effets, sa propagande.* Mouv. Social, June, 1913. Pp. 20.

A partial statement of the recent Neo-Malthusian literature, a short summary of the practices to prevent conception, together with infanticide, and a review of the various schemes proposed to increase the size of families in France. The author feels that religion and the Catholic church are the only forces which will accomplish this end.

DIX, A. *Auswanderung und Wanderarbeit. Materialien zur internationalen Wanderungsbewegung.* Weltwirtsch. Archiv, July, 1913. Pp. 16.

Possesses considerable interest in that it gives the official statistics of emigrants and immigrants from and to the principal countries of the world.

DUDFIELD, R. *On the increase of mortality from "injury at birth."* Journ. Royal Statist. Soc., July, 1913. Pp. 2.

Since 1891 the deaths due to injury at birth have increased from 50 to 846 in 1910. Part of this statistical increase seems to be due to a change in classification about the beginning of the twentieth century.

ELDETON, W. P. *Some recent statistical results.* Journ. Inst. Actuaries, Apr., 1912. Pp. 30.

*A discussion of the ability of life insurance companies through their records to contribute to our knowledge of heredity. Included in the study is a bibliography of recent writings in England upon parental resemblance and size of families.

FOERSTER, R. F. *Hourwich's "Immigration and Labor."* Quart. Journ. Econ., Aug., 1913. Pp. 15.

A critical review of the recent volume by Dr. Hourwich, taking particular exception to the theory advanced by the author with reference to the relation of immigration to labor.

LEROY-BEAULIEU, P. *L'émigration européenne et l'immigration dans les pays neufs au cours des dernières années.* L'Econ. Franç., June 28, July 5, 12, 1913. Pp. 6.

In the first of the issues is treated the emigration from the different countries of Europe; in the second, the immigration into the principal countries of America and Oceania; while in the third is discussed the probability that the Old World can continue to send forth the same number of emigrants from year to year and that the New World can continue to receive them.

LEROY-BEAULIEU, P. *La question de la population en France.* Acad. des Sciences Morales Polit., Apr., 1913.

MILLIS, H. A. *California and the Japanese.* Survey, June 7, 1913. Pp. 5.

The reasons for the enactment of the recent anti-alien land bill in California. This was the result of a fear that the Japanese would undersell the native-born Californians in farm produce. The legislation was unjust, unnecessary, and highly impolitic.

OERTEL, H. *The inaccuracy of American mortality statistics.* Am. Underwriter, May, 1913. Pp. 6.

Grave doubt is cast upon the accuracy of American mortality statistics. It is felt that clinical diagnosis is not supported in a sufficient number of cases by objective microscopic evidence or autopsy findings.

PARADISE, V. *The Jewish immigrant girl in Chicago.* Survey, Sept. 20, 1913. Pp. 6.

A sympathetic study of the problem confronting the Jewish immigrant girl upon her arrival in Chicago. The difficulty of earning a decent living is discussed in particular.

REED, A. C. *Immigration and the public health.* Pop. Sci. Mo., Oct., 1913. Pp. 25.

The activity of the health officials at Ellis Island in particular in endeavoring to stop the emigration of diseased aliens. Particular attention is given to such diseases as trachoma, with its effects upon public health.

ROSENBAUM, E. *Klimaschwankungen und Völkerwanderungen*. Weltwirtsch. Archiv, July, 1913. Pp. 7.

A study of the effect of the changes in climate and temperature upon the volume of migration. A period of poor harvest generally leads to an increased emigration from a country. As an increasing proportion of a population gets a living from some other source than agriculture, the influence of climate decreases.

DE THIOLLAZ, M. E. *Repopulation et colonisation*. Réf. Soc., June 16, 1913. Pp. 22.

The effect of the law of primogeniture in France upon the growth of population. The author proposes the formation of a company to loan money upon the security of real estate in order to make it possible for the younger members of a family to purchase property in the French colonies in North America.

THORNDIKE, E. L. *Eugenics with special reference to intellect and character*. Pop. Sci. Mo., Aug., 1913. Pp. 14.

A helpful article to the effect that intellect and character may be improved by proper mating; that there seems to be a connection between intellect and morality; and that by selected breeding it is probable that the innate faculties of men may be improved.

Report of the special committee on morbidity and mortality statistics in the United Kingdom. Journ. Royal Statist. Soc., July, 1913. Pp. 21.

Most of the article consists of a pains-taking bibliography of the official and non-official publications dealing with this subject, which have appeared in England during the past four decades.

La crise de la natalité en Belgique, depuis 1901. Rev. Soc. Catholique, Apr., 1913.

Les statistiques concernant la femme dans les Etats de l'Union Nord Américaine. Journ. Soc. Statist., June, 1913.

Geburtenrückgang. Politisch-anthropologische Rev., Apr., 1913.

Pauperism and Charities

(Abstracts by Frank D. Watson)

BARKER, J. E. *Great Britain's poverty and its causes*. Fortn. Rev., Aug., 1913.

Approximately 30 per cent of the British population live on the verge of hunger; the cause of their poverty is insufficient production. Free trade has created influences unfavorable to industrial efficiency.

DE BELLEGARDE, P. *Les dépenses administratives de l'assistance publique*. Rev. Philan., May, 1913. Pp. 5.

Defends the administrative expenses of public charity.

CARR-SAUNDERS, A. M. *The feeding and medical treatment of school children*. Econ. Journ., Sept., 1913.

An attempt to discern whether relief outside the poor law is ever justified in the form of free meals and medical treatment. Concludes in reference to the latter that "probably the most satisfactory course

would be to make it free to all children attending elementary schools"; and in reference to the provision of free meals, that in certain selected cases a system of free provision of meals should be followed "in consideration of the good which it undoubtedly does." "The system must not be administered so as to become permanent."

DALLU, P. *L'assistance obligatoire aux familles nombreuses indigentes*. Rev. Pol. et Parl., Apr., 1913. Pp. 14.

Discusses law passed by the Chamber and now before the Senate, granting assistance to all poor families having more than three children under thirteen, and to all widows having more than two children under thirteen.

FAVIERE, A. *Le rôle social de la charité*. Rev. Cathol. des Instit., Jan., 1913.

MAHONEY, W. H. *Benevolent hospitals in metropolitan Boston*. Quart. Pubs. Am. Statist. Assoc., June, 1913.

Beginning with the establishment in 1821 of the Massachusetts General Hospital, the first hospital to care for the indigent sick of Boston, the article discusses the development of the hospital system of Boston to the present day. Statistical data are included.

ROGERS, F. C. *Outdoor relief*. Econ. Rev., Apr., 1913.

VAN OVERBERGH, C. *Le régime legal de la bienfaisance privée en Belgique*. Réf. Soc., Sept. 1, 1913. Pp. 2.

Discusses the liberty and encouragement given to private benevolence under the constitution in Belgium.

L'organisation de la bienfaisance privée et le contrôle des établissements libres.

La liberté de la bienfaisance et des fondations charitables. Réf. Soc., Aug. 1, 1913. Pp. 21.

Discusses state control as opposed to private initiative in charity, urging freedom for the latter.

Le pécule-salaire dans les établissements de bienfaisance privée. Réf. Soc., Aug. 1, 1913. Pp. 49-52.

Discusses the system of wage-savings voted on by the Chamber of Deputies last July.

Socialism

BRAUN, H. *August Bebel als Sozialpolitiker*. Ann. f. Soz. Pol. u. Gesetz., III, 1-2, 1913. Pp. 19.

CARVER, T. N. *The trend toward socialism*. Independent, July 31, 1913.

CLARK, H. W. *The prospects of religion under socialism*. Nineteenth Cent., Aug., 1913.

CZOBEL, E. *Zur Verbreitung der Worte "Sozialist" und "Sozialismus" in Deutschland und in Ungarn*. Archiv f. d. Gesch. Soz., III, 3, 1913.

HANEY, L. H. *Der Einfluss des Sozialismus auf die Volkswirtschaftslehre*. Archiv f. d. Gesch. Soz., III, 3, 1913. Pp. 17.

HARRIS, N. *Coöperation: what it is, and its possibilities*. Charity Organ. Rev., June, 1913. Pp. 23.

LOUIS, P. *Le socialisme de 1848*. Rev. Bleue, March 22, 1913.

MAYER, G. *Der Untergang der "Deutsch-französischen Jahrbücher" und des Pariser "Vorwärts."* Archiv f. d. Gesch. Soz., III, 3, 1913. Pp. 22.

SCHMIDT, F. J. *Hegel und Marx*. Preuss. Jahrb., March, 1913.

SOMERVILLE, H. *English socialism of to-day*. Mouv. Social, July 15, 1913.

STANTON, T. *State ownership in France*. N. Am. Rev., Aug., 1913.

THOMPSON, C. D. *The vital points in charter making from a socialist point of view*. Nat. Munic. Rev., July, 1913. Pp. 11.

Housing

(Abstracts by James Ford)

ALLEN, J. G. *Rise in the cost of building*. Garden Cities & Town Planning, Sept., 1913. Pp. 3.

Shows increase in cost of building materials in past two years.

COCHRANE, C. *Rural housing and state grants*. Contemp. Rev., Aug., 1913. Pp. 7.

A good brief review of the English rural housing problems. Argues against local and state subsidization and for higher wages to agricultural labour through relieving farmer of certain tax burdens.

EBERSTADT. *Problems of town development*. Garden Cities & Town Planning, Aug., 1913. Pp. 5.

Comparison of housing and town planning problems and methods in Germany and England.

EDWARDS, A. T. *A criticism of the garden city movement*. Town Planning Rev., July, 1913. Pp. 8.

FELS, J. *Taxation, housing, and town planning*. Landscape Architecture, Oct., 1913. Pp. 12.

Taxation of land values to increase amount of land available for housing the working class.

FORCHHEIMER, K. *Die neue wohnungspolitische Gesetzgebung Oesterreichs*. Archiv f. Sozialwis., Mar., 1913. Pp. 20.

INGRAM, A. E. *English conference on housing and town planning*. Daily Cons. & Trade Rpts., July 17, 1913. Pp. 4.

Special consideration of promotion of cottage housing.

KUCZYNSKI, R. *Zur Kritik des Wohnungsgesetzesentwurfs*. Ann. f. Soz. Pol. u. Gesetz., III, 1-2, 1913. Pp. 70.

Highly detailed comparison of the Prussian housing bills of 1904 and 1913. General criticism.

MILLER, G. H. *Fairfield, a town with a purpose*. Am. City, Sept., 1913. Pp. 6.

Describes zoning system and building types of an industrial suburb.

NETTLEFORD, J. S. *Hereford garden suburb. The value of coöperation*. Town Planning Rev., July, 1913. Pp. 5.

ROSCHER, H. *Zur Wohnungsfrage*. Preussische Jahrb., Oct. 1913. Pp. 8.

Advocates reduced stringency in building legislation, as practiced in Hamburg, furthering erection by private capital of 2-3 room tenements.

THOMPSON, W. *The Ruislip-Northwood and Ruislip-manor joint town planning scheme*. Town Planning Rev., July, 1913. Pp. 12.

VEILLER, L. *How to work for housing reform*. Am. City, Sept., 1913. Pp. 4.

WHETHAM, W. C. D. and C. D. *Agriculture labour and rural housing*. Edinb. Rev., Aug., 1913. Pp. 21.

Urges landlords to reduce rents of farmer tenants upon their agreement to pay the amount in extra wages to their laborers; the latter shall rent cottages from landlord direct at a price which will make new construction possible.

Housing administration in 1912-13. Munic. Journ., Aug. 29, 1913. Pp. 3.

Excellent summary of housing schemes under English acts for year ending March 31, 1913.

Town Planning in 1912-13. Munic. Journ., Sept. 5, 1913. Pp. 3.

Summary of municipal housing under English Town Planning Act of 1909.

A Welsh housing trust. Garden Cities & Town Planning, July, 1913. Pp. 3.

Describes a limited dividend company, formed to acquire land and to promote coöperative building.

Statistics

(Abstracts by A. A. Young)

BOREL, E. *Considérations statistiques sur le taux de l'intérêt*. Journ. Soc. Statist., June, 1913. Pp. 10.

DUDFIELD, R. *Report of the special committee on morbidity and mortality statistics in the United Kingdom*. Journ. Royal Statist. Soc., July, 1913. Pp. 21.

A very complete bibliography of the subject.

DUGE DE BERNONVILLE, L. *Distribution de salaires et de revenus en divers pays*. Bull. Stat. Gén., July, 1913. Pp. 37.

A valuable study, utilizing wage statistics from Belgium, Great Britain, Italy, Germany, United States (Dewey report), and Massachusetts; income statistics from Prussia, Saxony, Austria, Denmark, and Norway. The dispersion of wages and incomes is shown by the use of averages, medians, and quartiles.

FUSTER, E. *Statistique internationale de l'invalidité*. Journ. Soc. Statist., Aug.-Sept., 1913. Pp. 44.

The best account and summary of the information available on this important topic yet published.

HUBER, M. *Les statistiques de la production industrielle*. Journ. Soc. Statist., July, 1913. Pp. 31.

A valuable article. Gives special attention to the methods and results of the recent English census of production, but also summarizes the work of other countries.

KELLER, O. *Accroissement de la production minérale et métallurgique du globe en l'espace de trente ans (1861-1890)*. Journ. Soc. Statist, Mar., 1913. Pp. 15.

A compilation, based upon the official *Statistique de l'Industrie minérale*.

MILLIET, E. W. *International statistics of the consumption of alcohol*. Quart. Pubs. Am. Stat. Assoc., June, 1913. Pp. 8.

Part of a report to the International Committee for the Scientific Study of the Alcohol Question.

NIXON, J. W. *An experimental test of the normal law of error*. Journ. Royal Statist. Soc., June, 1913. Pp. 5.

A study of the occurrence of the various digits in the seventh place of 10,000 logarithms, the digits being summed in various ways. The purpose is to "show how aggregates of quantities which conform to scientific law may yet exhibit signs of fortuitousness as tested by the normal curve of error.

DE PISSARGEVSKY, DE L. *Les statistiques concernant la femme dans les Etats de l'Union Nord Américaine*. Journ. Soc. Statist., June, 1913. Pp. 4.

Ingenious comparisons of the cultural state of "feminist" and "anti-feminist" states, utilizing figures taken from the *Statistical Abstract*.

THOMPSON, W. J. *The census of Ireland, 1911*. Journ. Royal Statist. Soc., June, 1913. Pp. 27.

An interesting general analysis of the results of the census, by its director. Why there should have been a marked increase in the proportion that persons over seventy make of the total population is a statistical problem not completely solved in the paper or in the discussion which followed.

WILLIS, H. P. *The thirteenth census*. Journ. Pol. Econ., July, 1913. Pp. 15.

A candid account of the factors responsible for the partial failure of the census of 1910.

Coût de la vie et salaires. Bull. Stat. Gén., July, 1913. Pp. 22.

The returns of an inquiry into the prices of necessities and the wages of household servants made by the *Statistique générale* through the mayors of all towns in France with more than 10,000 inhabitants. The wage returns contain evidence of inaccuracy.

Mouvement économique général. Bull. Stat. Gén., July, 1913. Pp. 4.

Figures are given for various indices of economic activity, including employment, prices, foreign trade, discount rates, bank loans, clearings, and railroad earnings, for France, Great Britain, and Germany. Three-month averages for 1912 and 1913 are reduced to index numbers with the period 1901-1914 as base. With diagrams.

NOTES

PROGRAM OF ANNUAL MEETING. The twenty-sixth annual meeting of the American Economic Association will be held at Minneapolis, December 27-30. The executive committee meeting will be held on Saturday, December 27, at 9 A. M., followed by a business meeting of the association with reports of committees, etc. The first session of the association will be held on Saturday morning; the subject for discussion will be The Control of Public Service Corporations. The second meeting, Saturday evening, is a joint session with the American Sociological Society, at which addresses will be delivered by presidents Kinley and Small. The third session, on Monday, is devoted to the subject of Theory of Making Railway Rates. On Monday afternoon there will be round table meetings; at one of these Professor Carver will describe the Rural Organization Service, and at another Professor Taylor will lead a discussion on Theory of Rent in the Light of Present Conditions in American Agriculture. On Tuesday, at the fifth session, the subject of Syndicalism will be considered; and in the afternoon, at the sixth session, The Economic Effects of the Legal Trust Dissolution. It is expected that Professor J. H. Gray will present a paper on The Control of Public Service Corporations; Dr. B. H. Meyer, on The Theory of Rates; Mr. John Graham Brooks, on Syndicalism; and Professor W. E. Hotchkiss, on The Economic Effects of Legal Trust Dissolution.

THE NATIONAL TAX CONFERENCE. The Seventh National Conference on State and Local Taxation was held under the auspices of the National Tax Association at Buffalo, October 23-25. There were present 245 delegates representing 18 colleges and universities, 33 states, Canada, and Porto Rico.

For the most part, the discussions this year followed those of last year, the chief topics being centralization of administration, classification of property, and the taxation of corporations, forests, and mines.

Several departures were recommended by Professor Seligman in his presidential address: that henceforth the conference should not confine its attention to state and local taxation, but should consider federal taxes also, particularly those affecting state and local taxes; that not only taxes and revenues, but expenditures, also, should be considered; the extension of the association's publishing activities; and the creation of a central office. Steps have already been taken to put most or all of these recommendations into effect.

Few papers of the conference provoked more animated debate than that of Professor Joseph French Johnson on "Increment Taxes and the Partial Exemption of Buildings." For the most part, this was a discussion of the so-called Sullivan-Shortt bill which proposes a reduction of taxation upon New York city buildings by 10 per cent each year for five years, at the end of which time they will be taxed upon only half of their value. It has been advocated chiefly as a means of encouraging building and relieving congestion. Professor Johnson claimed that such a change would probably result in higher buildings and lower rents, but an increase of congestion; that it would not have the slightest effect upon speculation; and that the most important result would be the decline in all land values and hence a much higher tax rate upon the smaller base. He advocated a 1 per cent increment tax upon New York city land values as being of a different nature, easily estimated and rapidly increasing in productivity from year to year. Mr. C. H. Shields of Washington and Mr. A. C. Pleydell of New Jersey denied the validity and pertinency of some of Professor Johnson's points. Mr. Shortt of Canada deprecated the custom of citing the experiences of Vancouver and other cities of British Columbia as conclusive of how such taxation would work in the long run, or in older communities: these cities are still in the experimental stage and present conditions point toward a reversal in taxation policies as well as a great collapse in values.

It is interesting to note in this connection that Pennsylvania has just adopted the principles of the Sullivan-Shortt bill for second-class cities, that is, for Scranton and Pittsburgh. However, the total 50 per cent reduction on buildings is spread over a longer period and will not be reached until 1925.

The committee on the taxation of public service corporations, of which Professor C. J. Bullock was chairman, advocated classification of property for purposes of taxation and thus the securing of real rather than formal equality. Mr. A. S. Dudley of the Chicago, Milwaukee and St. Paul Railway argued that classification means heavier and unreasonable taxation of corporations and opposed the tendency toward removal of all constitutional limitations as to uniformity. Professor T. S. Adams expressed the belief that the best protection from inequitable taxation is not in constitutions, but in the public sense of fair play.

Professor Fred R. Fairchild presented the report of the joint committee (with committee of National Conservation Conference) on forest taxation, which recommended a low annual tax plus a yield tax upon

the timber harvested. Mr. C. M. Zander of the Arizona Tax Commission presented the report of the committee on the taxation of mines and mineral lands. This recommended the taxation of ore deposits and output in such a way as to encourage development and at the same time to require the owners to pay their just share of taxes instead of exempting or favoring such property, as has frequently been the practice in the past.

In other papers and in a round table discussion led by Mr. L. E. Birdzell of North Dakota reports were made concerning problems and progress in various states. Professor O. C. Lockhart discussed the failure of Ohio to get rid of the general property tax; Professor J. A. Fairlie gave a somewhat similar report for Illinois; and Mr. Carlton B. Pierce for New Jersey. Mr. Adelbert Moot of New York recommended retrenchment in expenditures as did Mr. E. E. Woodbury, who recommended also the repeal of the New York "secured-debts tax law." Chairman T. F. Byrnes of the New York commission advocated increased powers for the commission instead of only advisory ones in the supervision of local assessments. Judge R. J. LeBoeuf of Albany advocated a gross earnings tax only for New York corporations and an efficiency in the administration of state revenues and expenditures comparable to that used in ordinary business. Mr. D. M. Link of Indiana discussed the term, salary, and method of selecting assessors; and Professor C. L. Raper the frequency of assessments. Mr. W. W. Pollock, of the Manufacturers Appraisal Co., Cleveland, Ohio, advocated the employment of private appraisal companies to aid public assessors in the securing of expert assessments. Mr. J. F. Adams of Colorado discussed the sales method of equalizing assessments; and Mr. Thomas E. Lyons of Wisconsin the supervision of assessments and the important precedent called the Daniels decision, which upholds the right of a state commission to reassess a county improperly assessed, even though the state constitution guarantees the right of home rule. Mr. T. B. Paton, general counsel for the American Bankers Association, surveyed the taxation of banks in the United States; and Dr. R. H. Whitten, statistician of the New York Public Service Commission, presented a paper on the "Relation between Value for Tax and Rate Regulation Purposes" wherein he maintained that each and every value is valid only for the purpose for which it is made.

Hon. Joseph E. Davies, United States Commissioner of Corporations, reviewed the tax legislation of the current year. Substantially this consists in the centralization of administration in six states, notably in Ohio; the establishment of six permanent state tax commissions;

the reduction, in Pennsylvania, of the rate applicable to buildings in cities of the second class; the adoption by Michigan of the New York "secured debts tax law"; the adoption of inheritance tax laws in two states and the revision of such laws in seventeen other states. In addition, Minnesota has divided all property subject to taxation into six classes; New Jersey and Arizona have adopted systems of tax maps; Wisconsin has made a number of changes with respect to its income tax; Pennsylvania and Connecticut have revised their forest taxation; Massachusetts, New York, and Nebraska have provided for special tax commissions and a variety of constitutional amendments have been adopted or are pending in twenty different states. Many of these provide for the separation of sources of state and local revenue or the classification of property for purposes of taxation. One pending in Pennsylvania proposes to permit graduated or progressive taxes; one in Oregon proposes graded and progressive taxes on income, and others in Kansas and Nebraska propose similar taxes on income, franchises, and occupations.

Michigan has adopted the New York "secured debts tax law," the repeal of which is advocated by Judge Woodbury, formerly chairman of the New York commission; Pennsylvania and Connecticut forest tax laws are along the lines recommended by the committee of the National Association (Professor Fairchild, chairman of the committee, is on the Connecticut commission); Connecticut as well as Massachusetts has followed New York in the adoption of the "model" inheritance tax law originally drafted by a committee of the National Association; and legislation in numerous other states has been influenced by the same law.

Of very great interest is the persistent retention of the general property tax system by Ohio in spite of repeated efforts to get rid of it and, further, the extremely advanced step recently taken in the supervision of assessments in an effort to enforce this system. All local elective offices relating to assessments and review have been abolished and the entire machinery put under the control of the state commission and its appointees. This centralization in Ohio exceeds that of Indiana, Wisconsin, or any other state. However, the appointment of assessors was not put under civil service regulation.

At the business meeting of the association, Mr. A. E. Holcomb, treasurer, reported a present membership of 425, practically a doubling within the past year, and also a very marked improvement in the finances, there now being a handsome balance on hand to devote to the

proposed extension of activities. All the old officers were re-elected and only two changes were made in the executive committee.

The association recommended holding the 1915 meeting on the Pacific coast, possibly at San Francisco. At present Indianapolis and Denver are the most active contenders for the 1914 conference. The times and places of both meetings, however, are determined finally by the executive committee. On the whole the 1913 conference was among the most successful yet held and the past year has certainly been the most prosperous one for the association.

Cornell University.

ROY G. BLAKEY.

CANADIAN POLITICAL SCIENCE ASSOCIATION. The need has long been felt in Canada of some organization of national scope for the discussion and investigation of political and economic problems. At the Boston meeting of the American Economic and Political Science associations last Christmas, a group of the Canadians in attendance held a meeting and made arrangements to organize such a society. During the year a good membership was built up and in September the organization was effected at Ottawa. At this meeting a program of papers was presented. While taking the name of the Canadian Political Science Association, the new organization proposes to deal with economic and social as well as with political problems. In order not to conflict with the meeting of the American societies, to which many of the members belong, it was arranged to hold the annual meetings in September. The next one will be held in September, 1914, in Toronto.

Officers were elected as follows: president, Dr. Adam Shortt, Civil Service Commission, Ottawa; vice-presidents, Professor James Mayor of the University of Toronto, Hon. Sydney Fisher of Ottawa, Herbert B. Ames, M.P., of Montreal; secretary-treasurer, Professor O. D. Skelton, Queens University, Kingston. The executive committee is composed of the foregoing and also Dr. James Bonar, Ottawa; Hector McInnes, K.C., Halifax; C. Hill-Tout, Vancouver, B.C.; President W. C. Murray, Saskatoon; G. Y. Chown, Kingston; Professor Stephen Leacock, McGill University; Professor G. I. H. Lloyd, University of Toronto; A. H. F. Lefroy, K.C., Toronto; Professor Montpetit, University of Laval, Montreal; John A. Cooper, Toronto.

It is announced that the proceedings of the 1913 meeting will shortly be published. Among the papers presented are to be noted: "The housing of our immigrant workers," by Bryce M. Stewart; "Agricultural credit in the West," by J. A. Stevenson; "The role of the middleman," by R. H. Coats; "Canada's balance of trade," by Dr.

James Bonar; and "The working of the Lloyd-George insurance act," by E. F. Newcombe, Jr.

The American Statistical Association is planning to celebrate its 75th anniversary with special observance in February, 1914. The anniversary meeting will be held in Boston. A more lasting memorial is planned in the publication of a book dealing with the development and progress of statistics in various countries of the world, to be prepared by leading statisticians. It is announced that representatives of 16 countries have already promised their coöperation.

The Third Conference of the National Housing Association will be held in Cincinnati, probably December 3, 4 and 5, 1913.

The National Association of Corporation Schools, which was organized a year ago, held its first annual convention at Dayton, Ohio, September 16-19. Professor Galloway, of the New York University School of Commerce, Accounts and Finance, was re-elected secretary of the association, and is preparing plans for the next convention, which will be held in the East.

HARVARD BUREAU OF BUSINESS RESEARCH. The Graduate School of Business Administration of Harvard University in 1911 increased its organization by establishing the Bureau of Business Research. In May, 1913, after two years of work in field and office, this bureau issued its first bulletin entitled *Object and History of the Bureau in Brief, with Some Preliminary Figures on the Retailing of Shoes*. A second edition is now ready.

The establishment of the Bureau of Business Research is but another symptom of the research spirit of the times. Many economists, particularly those of the younger generation, have for some time felt that more inductive study of actual economic processes and more specific knowledge of them should be gained before any further important constructive work in economic theory be attempted. If, then, the definition of business as applied economics should be accepted, the founding of the Bureau of Business Research might be held to have a close relation to this feeling among economists.¹

More specifically, however, the bureau was established to gather, classify, and describe facts about business.² It is believed that a university has, for gathering these facts, an inherently strategic posi-

¹ It is, doubtless, hardly necessary to say that at this stage the bureau is troubling itself very little about economic theory, although on pages 10, 11, and 13 of its bulletin some facts related to the theory of rent are mentioned.

² The first six pages of the first bulletin go more at length into the object and history of the bureau.

tion pertaining to a disinterested, non-competing, and trusted third party. But the main object of the bureau is to get precise and reliable information about business for the Graduate School of Business Administration. An important but incidental work is to furnish this information in usable form for the business world and for other institutions of training for business.

Business comprehends the great divisions of production, market distribution, and administration. Market distribution was selected as being the field of business most pressing for attention; shoes was selected as the commodity for study. Shoes is a commodity not so complex as some, and yet it is a staple, distributed in every main way—through wholesaler and retailer, through dealer only, direct to the user, through the manufacturer's own store, and by mail. For its retailing there are all the main types of retailer—the retailer with but one store selling one commodity, footwear only; the department store in the city; the general store in the country; the chain store, manufacturer's and non-manufacturer's, local and interstate, with a varying number of store-units handling footwear only.

The first concrete task was to find out and assemble the operating costs of a large number of shoe stores and shoe departments. In the summer of 1911, field agents visited shoe retailers in Ohio and Wisconsin, as typical American areas, and soon learned that practically no two retailers kept their accounts in the same way. Some, for example, reckoned profits on the cost and some on the selling price. Some charged salary for their own time and rent for their own stores, while others did not. Some meant one thing by selling expense and some meant another. Figures that could be adjusted and made serviceable were secured, but the need of a common basis of comparison, a common measure, was clearly seen. The standard example of the uniform system of accounts for railroads was, of course, before the bureau. But this was imposed from above by authority; its adoption did not rest upon voluntary coöperation. More recently the United Typothetae of America has succeeded in enlisting a large proportion of the printers of the country to adopt a uniform set of accounts³ permitting accurate cost comparisons. Early in 1912 the bureau gave to the trade a uniform accounting system for shoe retailers. It has been received kindly by various trade associations both national and local, by trade papers, and by the shoe retailer individually.

In the summer and fall of 1912 more agents of the bureau were out

³ Standard Uniform Cost Finding System, devised by American Printers Cost Commission.

in the East, on the Pacific coast, and in the central West, explaining and introducing the system, and securing figures direct from the books of shoe dealers. In May, 1918, there were full and reliable data on a uniform basis of accounting collected from 180 shoe stores representing nearly every section of the country but especially eight large cities—New York, Philadelphia, Baltimore, Pittsburgh, Cleveland, Detroit, Chicago, and Cincinnati. On this data was based the first bulletin, which discussed specifically; gross profit, total operating expense, the various expenses of buying, sales force, advertising, deliveries, rent, interest, and the topics of stock-turns and annual sales of the average salesperson. Range figures were given, lowest and highest, and central figures (not averages); and, finally, figures about which there was a concentration sufficient to indicate a realizable standard.

In the summer of 1918, more extensive field work than ever was carried on. Field agents visited shoe retailers in the states of Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Ohio, Indiana, Michigan, Illinois, Wisconsin, Iowa, Missouri, and California. In September, the number of retail shoe stores adopting the bureau's uniform accounting system or coöperating to the degree of furnishing specific figures from their own businesses was over 600. With this *much broader basis of data it will be possible to make narrower cost classifications than before*; for example, according to the population *of the community where the concern is located, the volume of business done, and the grade of business done*. Thus will the analyzed costs of retailing, actual and possible, be obtained, while the costs of distributing by wholesalers and by manufacturers selling direct, will also be secured—this last a much less tedious and expensive task.

The bureau has also been making a further reconnaissance of the field of distribution and has selected certain other commodities for investigation—ready-to-wear clothing, groceries, books, and hardware, to be taken up in the order named, about one year apart. The possibility of work for the bureau is vast. The side of distribution between the producer of raw material and the manufacturer has not been touched at all, and besides distribution there are the great fields of production and administration.

In conducting the work of the bureau, the field agent is absolutely essential. Although an extensive mail propaganda has been carried on, statistics prepared after two years' and one month's work showed that over four fifths of the adopters and data had been secured by agents, as opposed to mail; and the quality of their information is so far superior that the mail information is used for corroborative purposes

only. So far, these agents have been chosen from the school's staff and from second-year students. These are graduate students with training in economics, accounting, and business organization. The plan affords an opportunity to students of the school to gain experience during the summer months. As the students for this work are carefully selected, because of the quality of their own work and other considerations, it has already become a mark of distinction, and a corresponding stimulus to be chosen as a field agent of the bureau. Even if it becomes necessary to establish a permanent nucleus of more mature field agents, there will always be an opportunity for supplementary work by these selected student agents. Such appointments might be somewhat fancifully called business interne-ships.

The Bureau of Business Research has received much appreciated aid in the form of suggestions and constructive criticism from many sources. It welcomes communications or coöperation of any nature from any reader interested in its work.

Harvard University.

SELDEN O. MARTIN.

The New York School of Philanthropy, under the directorship of Edward T. Devine, began the year in enlarged quarters on the top floor of the United Charities Building. In his annual report for the year 1912-13, the director calls attention to the addition of Porter R. Lee, Henry W. Thurston, Kate Holladay Claghorn, and George E. Johnson to the permanent staff, giving their entire time to the work of the school; the requirement of two full academic years of resident study for the diploma; and the closer alliance with the work of various philanthropic agencies of the city and municipal departments.

The Interstate Commerce Commission has selected a permanent advisory board on the valuation of railroads, under the act recently passed by Congress, to assist the director. Dr. Edward W. Bemis has been appointed a member of this advisory commission, together with Hon. J. S. Williams, Assistant Secretary of the Treasury, and C. F. Staples, of the Minnesota Railroad and Warehouse Commission.

Mr. J. M. Atkinson, chairman of the Missouri Public Service Commission, has recommended to the curators of the University of Missouri, the establishment of a chair for instruction on the subject of physical valuation and appraisalment of public utilities. It is advised that such a course be opened in connection with the economic and engineering department for the instruction of students who would be eligible for employment by the commission.

The Bureau of the Census has decided to undertake a new investigation relating to wealth, debt, and taxation. This will continue the inquiry begun in 1902, a report of which was printed in 1907. Dr. John Lee Coulter has been appointed representative of the Bureau of the Census to take charge of this investigation.

The name of the Bureau of Labor of the federal Department of Labor has been changed to "The Bureau of Labor Statistics."

The United States Commission appointed by President Wilson to make a special investigation of rural credit in European countries has intrusted the drafting of the report to a committee of which Dr. John Lee Coulter is chairman. It is expected that the report will be presented during the coming session of Congress.

The American Commission, organized under the direction of the Southern Commercial Congress for study of rural credit, will also submit a report. This will be available as a public document early in December.

The Cambridge Housing Association, of which Professor James Ford of Harvard University is president, has made its first report, *Housing Conditions in Cambridge* (Arthur C. Comey, secretary, Harvard Square, Cambridge, Mass., pp. 31). A special investigation covered 397 houses in 7 sections of the city. Statistical tables show the number of families per house, construction and state of repairs of houses, lighting of rooms, and conditions of toilets and cellars.

The Massachusetts Commission of Immigration is to report in January its findings and recommendations as to the conditions of the foreign population of the state. The chief matters under consideration are the protection, education, and distribution of immigrants. The commission has a number of investigators in the field and is holding public hearings at various typical industrial centers. Miss Grace Abbott, secretary of the Immigrant Protection League of Chicago, is executive secretary of the commission (Room 440, State House, Boston).

At the last session of the legislature of New York a commission to revise the banking law was created; 14 members constitute this commission. Mr. A. Barton Hepburn is chairman, and on the membership is to be noted Professor Joseph F. Johnson, of New York University. The commission will hold public hearings, to which will be invited bankers, economists, and others interested in the revision of the banking law.

The Industrial Development Bureau of the Merchants Association of New York is engaged in making an industrial survey of New York city, under the direction of Dr. Edward E. Pratt, formerly of the New York School of Philanthropy. The inquiry has for its object, first, to find out the disadvantages which local manufacturers labor under, with the idea of eliminating them, and, second, to discover the fundamental economic advantages of New York city for different lines of industry, for the purpose of bringing new factories and industries into the New York territory.

The Department of Labor Statistics, Board of Trade, London, announces the appointment of F. H. McLeod as director.

By a decree of May 13, 1913, the French government has constituted a special commission of 24 members, to investigate the factors affecting the health and efficiency of the laboring population and the various problems connected with its vocational distribution. The Minister of Labor (M. Henry Chéron) is president of the commission and its whole personnel is of unusual distinction. Two sub-commissions have been formed, one of which is to concern itself with physiological problems, while the other will direct various statistical inquiries which will be undertaken by the Ministry of Labor.

Housing conditions and rents continue to be the subjects of frequent investigations by European statistical bureaus. The results of recent inquiries will be found in: "Bulletin de la Statistique Générale de la France," July, 1913, p. 390; "Beiträge zur Statistik der Stadt Mannheim," 1912, Nos. 27, 29; "Der Wohnungsmarkt in München," München, 1913; "Der Wohnungsmarkt in Strassburg, Beiträge zur Statistik der Stadt Strassburg," 1913; "Die Mietpreise in der Stadt Zürich in den Jahren 1907 bis 1911," Zürich, 1913.

Mr. A. N. Kiaer, who has had such an honorable career as director of the Statistical Bureau of Norway since 1867, has recently resigned. His successor is Mr. Rygg, professor of political economy and statistics at the University of Christiania.

During the past year the libraries of the New York Charity Organization Society, the Association for Improving the Condition of the Poor, the New York School of Philanthropy, and the Russell Sage Foundation, have been merged into one, to be known as the Russell Sage Foundation Library. This is now housed in a new building at Lexington Avenue and 27th Street. The library contains about 10,000 bound volumes and 15,000 pamphlets; 250 periodicals are received, and articles of value are clipped, filed, and indexed.

A. C. McClurg & Co., of Chicago, announce the publication of "The National Social Science Series," edited by President McVey, of the University of North Dakota. Among the volumes for early publication are *The Family*, by Professor J. M. Gillette; *Money*, by Professor William A. Scott; *Taxation*, by C. B. Fillebrown; *Competition*, by J. F. Crowell; and *Political Economy*, by President McVey. The purpose of this series is to "furnish for busy men and women a brief but essentially sane and sound discussion of present-day questions." The price of each volume will be 50 cents.

A new edition of the *Immigration Problem*, by J. W. Jenks and W. J. Lauck, is announced.

Sir Isaac Pitman & Sons announce a new serial publication, Pitman's *Commercial Self-Educator*, in 16 seven-penny fortnightly parts, illustrated. Mr. Robert W. Holland, author of business legal books, and lecturer on commercial subjects, is the editor.

The New York Public Library has at its disposal a number of copies of a volume issued by the National Association of Customs Brokers, copyrighted in 1909, and entitled *Customs Tariff Act of August 5, 1909, with Alphabetical Schedule and Administrative Provisions, Superseding the Customs Administrative Act of 1880 etc.* The volume contains also the text of the Cuban reciprocity treaty; sealing act of December 29, 1897; pure food act of March 3, 1903, and list of parcel-post countries; and is especially valuable for its elaborate index of the Payne-Aldrich act, and full references to all Treasury decisions. Libraries desiring a copy may obtain it by applying to the Reference Librarian, New York Public Library, New York, and enclosing eight cents to cover postage.

The federal Department of Agriculture has begun the publication of a new "Journal of Agricultural Research." The first number was issued in October. It is designed to give early notice of the economic value of progress in scientific research applied to agricultural problems. For the first few issues the publication will be largely confined to papers from the Department of Agriculture only. Later numbers will probably include articles prepared by investigators in state colleges and experiment stations. The publication is technical in character and will not be circulated except among scientific specialists.

The Department of Agriculture has discontinued the publication of the "Monthly Crop Reporter." Crop statistics will be furnished for the press as heretofore, and there will be issued a "weekly news letter" in typewritten form.

- The "Washington University Studies" is a new quarterly publication. Each alternate number is to be devoted to studies in philology, philosophy, psychology, history, economics, and sociology, while the remaining numbers are devoted to the natural sciences and to technology. The second number (St. Louis, Oct., 1918) is edited by Professor A. A. Young, and contains, beside historical and literary papers, articles by Dr. G. B. Mangold and Dr. C. E. Persons summarizing the results of recent investigations undertaken by the School of Social Economy of Washington University. These studies relate to "Industrial opportunities of children in St. Louis," and "Neglected children."

Mr. and Mrs. Sidney Webb, during October and November, gave six lectures in London on the general title "Socialism Re-stated." These will shortly be published.

Gustav Fock, Schlossgasse 7-9, Leipzig, has issued *Catalogue No. 433*, giving a list of books on political economy, taken from the libraries of P. Hirsch of Berlin, K. P. Hermes of Charlottenburg, and R. Seigfried, professor at the University of Königsberg. Over 4700 items are listed.

The School of Commerce, Accounts and Finance of New York University announces the publication of a new magazine "Business Education." The sub-title is "A Self-Filing Magazine of Business Information." Every article is indexed for the purpose of filing and giving the reader a more correct idea of its contents than the title might indicate. The magazine is to be so arranged that no two articles will be on the same page, thus permitting the filing of each article without destroying any other. Dean Joseph French Johnson is consulting editor; Charles W. Gerstenberg, secretary of the School of Commerce, Accounts and Finance, is managing editor; and Mr. Richard P. Ettinger is business manager.

In "The Nation" for September 4 reference is made to the publication of a new monthly magazine, edited by Dr. Giovanni Preziosi, entitled "La Vita Italiana all' Estero." This consists of 80 pages a number, and contains articles concerning the condition of the Italians in the United States. It is published at Via Due Macelli, 9, Rome; annual subscription is 12 lire.

"Die Geisteswissenschaften" is a new weekly publication of which the first number appeared on October 1 (Leipzig, Veit & Comp.). Edited by Dr. Otto Buck and Professor Paul Herre, its purpose is to furnish a clearing center for the various special interests within the

general field of the humanities, much as *Science* serves the natural sciences in this country. Its plan provides for contributions of general interest by specialists, for papers and discussions relating to the status of universities and other institutions of learning and to methods of instruction and research, for reports on the progress of research in special fields, and for reviews, accounts of the meetings of learned societies, personal notes, and current bibliography. The first number sets a very high standard, counting several well-known leaders of German thought among its contributors. Of special interest to economists are papers by Professor Rudolph Eucken on "Zur Einigung der Geisteswissenschaften" and by Professor Paul Mombert on "Die neure Entwicklung der Bevölkerungslehre in Deutschland." -

Appointments and Resignations

Professor Edward M. Arnos has returned to Olivet College, after a year's absence spent at the University of Chicago.

Dr. Gilbert G. Benjamin has been appointed assistant professor of sociology in the University of Pittsburgh.

Mr. Lee Bidgood, lately of the University of Wisconsin, has been appointed professor of economics in the University of Alabama.

Mr. A. L. Burt has recently been appointed lecturer in history and economics at the University of Alberta, Edmonton, Alberta.

Professor Frank T. Carlton, of Albion College, is giving a course in labor problems at the University of Michigan during the first semester of the current college year.

Professor John R. Commons has resigned from the Wisconsin Industrial Commission. He returns to his work in the University of Wisconsin.

Professor William J. Cunningham, of Harvard University, has been appointed president's assistant of the New York, New Haven & Hartford Railroad, with headquarters at New Haven. He has been granted partial leave of absence, and will lecture at Harvard one day per week.

Mr. Frederick A. Dewey has been appointed lecturer on economics and sociology at Bryn Mawr College.

Dr. A. S. Dewing, formerly of Harvard University, is instructor at Yale University, conducting courses in corporate finance.

Professor John C. Duncan, lately of the University of Illinois, has been appointed professor of administration and accountancy in the University of Cincinnati College of Commerce.

Professor Richard T. Ely has returned from Europe and resumed work in the University of Wisconsin. While abroad he gave a series of lectures at the University of London, and continued on the continent the study of the land problem, in which he has for some time been engaged.

Dr. J. A. Estey, of Dalhousie University, Nova Scotia, has been appointed instructor in economics in the University of Wisconsin.

Professor W. C. Fisher has been appointed lecturer at Harvard University, and is to conduct a course during the second half-year on socialism and the modern labor movement in Europe.

Professor Lee Galloway, of the New York University School of Commerce, Accounts and Finance, has been elected vice-president of the American Fair Trade League, which is interested in exposing methods of unfair competition and fraudulent advertising. Professor Galloway is gathering statistics for the league relative to marketing methods in the wholesale and retail business.

Mr. Gerhard A. Gesell, recently at the University of Kansas, has been appointed assistant professor of economics at the New York University School of Commerce.

Professor Stephen A. Gilman, of the University of Wisconsin, conducted a party of students during the past summer in visiting important business establishments in Germany and neighboring states.

Dr. L. C. Gray, lately of the University of Wisconsin, has been appointed associate professor of economics in the University of Saskatchewan. He is planning to spend the next three years largely in a study of the special economic problems confronting the farmers of Saskatchewan, and for this purpose a liberal research fund has been placed at his disposal.

Mr. P. W. Green has resigned his position in the economics department of Washington State College.

President Arthur T. Hadley has been elected a director of the New York, New Haven & Hartford Railroad.

Professor M. B. Hammond, of the Ohio State University, was appointed in July a member of the Industrial Commission of Ohio. He will retain his connection with the department of economics at the university. A law authorizing this new commission is patterned after that of Wisconsin. It creates a commission of three, each appointed for a term of six years, at a salary of \$5000.

Mr. G. W. W. Hanger has recently been appointed a member of the new Board of Mediation and Conciliation. Mr. Ethelbert Stewart, of Illinois, has been appointed chief clerk of the Bureau of Labor Statistics of Washington, to succeed Mr. Hanger.

Professor C. C. Huntington, of the Ohio State University, has been promoted to a full professorship of economics and sociology.

Dr. G. N. Janes has been made instructor in economics and political science at the University of Washington, Seattle.

Professor Emory R. Johnson has been appointed a member of the Public Service Commission of Pennsylvania. His term runs for seven years.

Dr. J. B. Kennedy, lately instructor of economics in Union College, Schenectady, has accepted the position of professor of economics and history at the Presbyterian College of North Carolina.

Mr. Alvin H. Kessler has been appointed instructor in journalism in the School of Economics, University of Pittsburgh.

Mr. William H. Kiekhoefer has been promoted to an instructorship in economics in the University of Wisconsin.

Mr. J. Gordon McKay has been appointed assistant in economics in the University of Wisconsin.

Mrs. Theresa McMahan, of the University of Washington, has been appointed on the Minimum Wage Commission created by the last legislature.

Dr. James D. Magee, formerly of Western Reserve University, has been appointed instructor in economics in the University of Cincinnati.

Professor Royal Meeker has resigned his position in the department of economics in Princeton University, and assumed charge of the federal Bureau of Labor Statistics at Washington.

Mr. A. A. Osborn has been appointed instructor in commerce and industry in the School of Economics, University of Pittsburgh.

Dr. Edward E. Pratt during the past summer directed the courses of economics in Europe for New York University. Thirty-five students were members of these courses, divided into three groups: (1) European commerce and industry; (2) labor problems and industrial betterment; (3) social problems. The countries visited included England, Scotland, Denmark, Norway, Sweden, Holland, Belgium, France, and Switzerland. For this work the students receive university credit leading to higher degrees.

Mr. Charles H. Preston, of the New York University School of Commerce, has been appointed to an assistant professorship of business administration.

Professor C. L. Raper, of the University of North Carolina, has been appointed correspondent of the federal Rural Organization Service for the district covering the states of North Carolina, South Carolina, Virginia and Maryland. During the past summer Professor Raper served as an expert for the Constitutional Amendments Commission of North Carolina.

Dr. W. E. Rappard has resigned his position as assistant professor in Harvard University, having accepted a professorship of economic history at Geneva University.

Mr. Stockton Raymond has resigned his position in the department of economics and sociology at the Ohio State University to engage in practical philanthropic work.

Miss Emilie Renz has been appointed instructor in economics and sociology at the Ohio State University.

Professor E. A. Ross, of the University of Wisconsin, is on leave of absence for the first semester of the current year to investigate sociological conditions in South America.

Mr. Clare L. Rotzel, of the New York University School of Commerce, has been promoted to an associate professorship of accounting.

Miss Beatrice H. Sheets has been promoted as assistant professor in the Ohio State University.

Mr. Herbert D. Simpson, of Mt. Union College, Alliance, Ohio, has been appointed instructor in economics in the University of Wisconsin.

Professor A. W. Taylor, of Washington State College, has been appointed by the federal Rural Organization Service as collaborator for the Northwest.

Professor Carl W. Thompson has resigned his position at the University of Minnesota and accepted a position with the Rural Organization Service at Washington.

Mr. J. A. Todd, formerly on the staff of McGill University, has been appointed professor of economics in Dalhousie University.

Dr. Frank D. Tyson, lately of the New York School of Philanthropy, has been appointed instructor in sociology in the University of Pittsburgh.

Mr. V. N. Valgren has been appointed to an assistant professorship of economics in the University of Kansas.

Professor Albert W. Whitney, lately of the University of California, has been appointed associate actuary of the New York State Insurance Department. In 1905 Professor Whitney was employed by the Board of Fire Underwriters of the Pacific to prepare and report on the rates to be charged for policies containing the co-insurance clause. In 1906 he was employed by the Chamber of Commerce of San Francisco to investigate and report on the settlement made by fire insurance companies of the losses arising through the conflagration of that year. In 1910 he was retained as actuary to the joint committee of the legislature of New York, authorizing an investigation of the affairs of insurance companies other than those doing a life insurance business. As a member of the Actuarial Society of America, Professor Whitney has made various contributions.

Dr. N. R. Whitney has been appointed instructor in political economy at Johns Hopkins University.

During the past summer Professor Philip B. Kennedy, instructor in trade and transportation in New York University, and Mr. William J. Barney, made an investigation in Europe in regard to the economic, commercial and industrial aspects of free ports. This inquiry was made under the auspices of the Committee of Foreign Trade of the Merchants' Association.

Professor Robert Coit Chapin, of Beloit College, died September 12, at the age of fifty. He was the author of *The Standard of Living Among Workingmen's Families in New York City*, an investigation based on studies as secretary of a committee working under the auspices of the Russell Sage Foundation.

